

MASS. MA 2.1153

✓ MASS MA 2.102 1153

HIGHER SKILLS, HIGHER WAGES AND HIGHER ACHIEVEMENT

AN EVALUATION OF THE MASSACHUSETTS WOMEN IN NONTRADITIONAL OCCUPATIONS PROJECT

Supported by grant number E-9-4-5-0012 from the Women's Bureau, United States Department of Labor

UMASS/AMHERST



312066016682626

MECHANICS AIRPLANE PILOTS & NAVIGATORS ANNOUNCERS ARCHITECTS AUTOBODY REPAIRERS & MECHANICS

BROADCAST EQUIPMENT OPERATORS & STONEMASONS BUS & TRUCK ENGINE MECHANICS

BUTCHERS & MEAT CUTTERS CABINET MAKERS BENCH CARPENTERS CAMERA WATCH & MUSICAL INSTRUMENT REPAIRERS CARPENTERS CARPET INSTALLERS



TECHNICAL CIVIL ENGINEERS CLERGY CONCRETE & TERRAZZO FINISHERS CONSTRUCTION INSPECTORS CONSTRUCTION LABORERS CONSTRUCTION



TRADES HELPERS CORRECTIONAL INSTITUTION OFFICERS CRANE & TOWER OPERATORS CRUSHING & GRINDING MACHINE OPERATORS DATA PROCESSING

EQUIPMENT REPAIRERS DENTISTS DRAFTERS DRIVER SALES WORKERS DRYWALL INSTALLERS ELECTRICAL & ELECTRONIC ENGINEERS AND TECHNICIANS



ELECTRICAL POWER INSTALLERS & REPAIRERS ELECTRICIANS ELEVATOR INSTALLERS & REPAIRERS ENGINEERS EXCAVATING & LOADING MACHINE OPERA-

TORS EXTRUDING & FORMING MACHINE OPERATORS FIREFIGHTING OCCUPATIONS FISHERS FREIGHT STOCK & MATERIAL HANDLERS FUNERAL DIRECTORS

FURNACE, KILN & OVEN OPERATORS FURNITURE & WOOD FINISHERS GARAGE & SERVICE STATION OCCUPATIONS GARBAGE & REFUSE COLLECTORS



GEOLOGISTS & GEODESISTS GLAZIERS GRADER, DOZER & SCRAPER OPERATORS GROUNDSKEEPERS & GARDENERS GUARDS & POLICE HAND MOLDERS &

SHAPERS HEATING AIR CONDITIONING & REFRIGERATION MECHANICS HELPERS CONSTRUCTION TRADES HEAVY EQUIPMENT REPAIRERS HORTICULTURAL

SPECIALTY FARMERS HOUSEHOLD APPLIANCE & POWER TOOL REPAIRERS HUNTERS INDUSTRIAL MACHINERY REPAIRERS INDUSTRIAL TRUCK &



TRACTOR EQUIPMENT OPERATORS INDUSTRIAL ENGINEERS INSULATION WORKERS JANITORS & CLEANERS JUDGES LOCKSMITHS & SAFE REPAIRERS LOCO-

MOTIVE OPERATORS MACHINISTS MAIL CARRIERS POSTAL SERVICE MANAGERS FARM MANAGERS & ADMINISTRATORS SELF-EMPLOYED

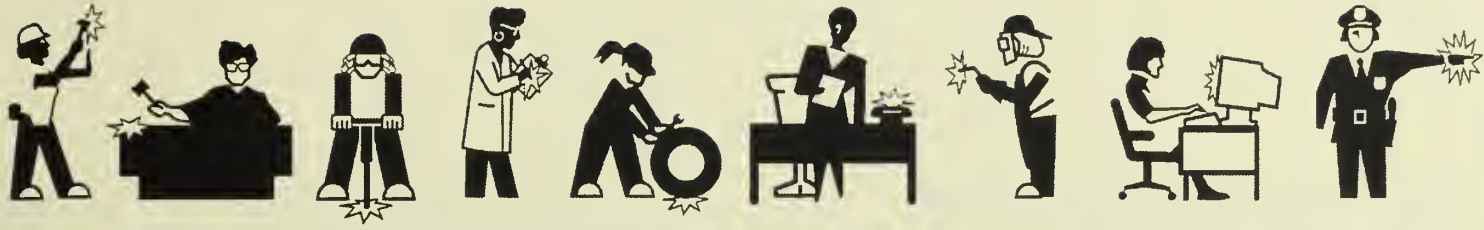


MECHANICAL ENGINEERS MECHANICAL ENGINEERING TECHNICIANS MESSENGERS METER READERS MILLWRIGHTS MISC. PRECISION WORKERS MISC. WOOD



Digitized by the Internet Archive
in 2014

<https://archive.org/details/higherskillshigh00mass>



HIGHER SKILLS, HIGHER WAGES AND HIGHER ACHIEVEMENT

AN EVALUATION OF THE MASSACHUSETTS WOMEN IN NONTRADITIONAL OCCUPATIONS PROJECT

Supported by grant number E-9-4-5-0012 from the Women's Bureau, United States Department of Labor

Published by the Massachusetts Division of Employment and Training, Department of Labor and Workforce Development and MOICC-Massachusetts Occupational Information Coordinating Committee, Department of Labor and Workforce Development - January 1997
Equal Opportunity Employer/Program
Auxiliary aids and services are available upon request to individuals with disabilities

Commonwealth of Massachusetts
William F. Weld, Governor
Argea Paul Cellucci, Lieutenant Governor
Angela Buanapane, Director, Department of Labor and Workforce Development
Nils L. Nardberg, Deputy Director, Division of Employment and Training

Acknowledgements

Higher Skills, Higher Wages and Higher Achievement, an Evaluation of the Massachusetts Women in Nontraditional Occupations Project is the result of the cooperation of variety of people within the employment and training system.

This publication was made possible through the financial support of the Women's Bureau of the United States Department of Labor under grant number: E-9-4-5-0012. Angela Rizzolo, Region I, Women's Bureau, offered invaluable support through the entire Massachusetts Nontraditional Occupations for Women project.

The dedicated Advisory Committee to the Massachusetts Women in Nontraditional Occupations project comprised of Kim Hoa Granville and Jane Kadlubkiewicz of the Division of Employment and Training; Maria Duca and Joanne Susi, Metro South/West Workforce Development and Career Center; Michalene Kosinski, North Central Regional Massachusetts Employment Board; and Eleni Papadakis, from the Corporation for Business, Work and Learning (formerly the Bay State Skills Corporation) and Priscilla Golding from Women in the Building Trades provided helpful insights and other information for this evaluation.

Mary Richer, the Field Research Department of the Division of Employment and Training provided editorial assistance. Vickie Green of the Division of Employment and Training provided technical assistance on software conversion and formatting. The creative talent of Sandra Schafer, Sandra Schafer Design, who designed the format of this publication is very much appreciated.

Data for this evaluation was gathered from statistics compiled by the management information system (MIS) of the Division of Employment and Training and reports from the Directors of the Metro South/West Service Delivery Area and the North Central Massachusetts Regional Employment Board and the Project Coordinators from the Bay State Skills Corporation and the Massachusetts Industrial Services Program. Post-fifty-two week follow-up was conducted using the Division of Employment and Training's Unemployment Insurance Wage database. The program participants were matched to the quarterly wage and employment status data. In addition to interviews with advisory committee members, employers and training instructors were interviewed and surveys and focus groups with participants were conducted by the principal investigator. The recommendations are those of the author.

Dorothy Rona Sullivan
Project Evaluator

Table of Contents

Executive Summary	4
Introduction	8
The Participants	11
Recruitment	25
Retention	31
The Participants' Perspective	40
Training	47
The Participants' Perspective	57
Placement	63
The Participants' Perspective	73
Summary	77
Findings and Recommendations	83

Executive Summary

Fifty-nine women were trained through the Women in Nontraditional Occupations program which was implemented in two distinct geographical, industrial, and demographic regions of Massachusetts: the Metro South/West and the North Central Massachusetts Service Delivery Areas (SDAs).

The evaluation provided a close examination of the program, analyzing the experiences of its two distinct components. The experience held important lessons on strategies to recruit and retain women in nontraditional programs. The project yielded replicable approaches for training and placing women enrolled in nontraditional occupations training.

Multiple outreach strategies, including public service announcements, were used extensively to ensure participation rates in the program. Each SDA engaged in comprehensive recruitment to encourage women to consider nontraditional careers.

The most fruitful recruitment methods for the Metro South/West SDA were reverse referrals from training institutions to the training sponsor, the public assistance agencies, and the local employment service office.

One-half of the North Central Massachusetts participants learned of the program from classified ads and newspaper articles. Referrals from employers were a major source of program recruits.

Vocational and career counseling were integrated into training programs because some job seekers were not sufficiently informed about wages and occupational outlook.

The wages expected by participants upon enrollment averaged higher than the training sponsor's projected placement wages and were substantially above the entry wages subsequently obtained. The Metro South/West participants were required upon program acceptance to research the occupation they pursued. In mid-October, the North Central participants completed the Industry Trends and Occupations workshop. By June 1996, the anticipated wages approximated the actual entry wages offered the graduates of the program.

Self-awareness and self-esteem workshops which were included in the nontraditional occupations training were found to be beneficial for training retention and participants' confidence.

A series of workshops were held in each SDA to help the women to prepare for the challenges of working in a nontraditional environment. Sixteen participants (57% of the enrollees) attended these workshops in the Metro South/West. Twenty-seven North Central participants (87% of the enrollees) completed the series of workshops. These women strongly recommended the self awareness and self-esteem workshops.

Training sponsor administrators believed that the self-awareness and self-esteem workshops improved the training component retention rate (89% in Metro South/West and 97% in North Central Massachusetts).

Mentoring programs required tremendous time commitment, coordination and planning.

The mentoring component was particularly difficult to implement because of the small pool of women employed in nontraditional occupations who were willing to make the time commitment. In the Metro South/West SDA, twelve months were required to recruit two mentors for four students at TAD Technical Institute.

One-hundred fifty women were contacted over eleven months by the North Central REB project for mentor leads. Mentor identification of thirty women yielded by March eight women able to provide mentoring. The ratio of mentors to proteges was one-to four. Some participants reported positive mentor/protege experiences.

Each region developed a different training model which impacted recruitment efforts, the delivery of supportive services and retention rates. The Metro South/West program provided individual referrals for occupational instruction at diverse training institutions. The North Central Massachusetts program designed a late afternoon group training program focusing on transferrable skills and exposure to occupational skills in the plastics industry.

The Metro South/West SDA provided training opportunities to twenty-eight women, twenty-seven in nontraditional programs including electrical, electronics/communications training (3 women), automotive mechanics (4), small appliance and electrical repair (7), laboratory technologies (5), carpentry (1), data processing (4) [the source of one-fourth of SDA services employment], graphics and printing equipment (2), and truck driving (1). The remaining participant enrolled in a computer facilities training program (although traditional) which offered high wages in occupations with favorable outlooks. The Metro South/West training program retention rate was eighty-nine percent, much higher than the seventy percent retention rate of non-participants.

Thirty-one women enrolled in the North Central Massachusetts Plastics Technology/Technician program. The program provided introductory training through hands-on workshops in machining, computer-assisted design, and computer processing. The training retention rate of ninety-seven percent compared favorably to a sixty-five percent training retention rate for non-participants.

A modified voucher approach permitted individualized, customized training meeting the interests and aptitudes of the participants. It was empowering for the participants, but time-consuming for the training sponsors. The process was dependent on academic calendars and involved fiscal controls, contracting, scheduling, interagency coordination, and intensive follow-up.

The average time elapsed from the participant's first contact with the Metro South/West's intake to the start of the individualized training was ten weeks, with a mode of seven weeks. The enrollment of participants was impacted by academic schedules. During the first four months of the MSW program, women enrolled in training programs at proprietary and regional vocational technical schools which had monthly start dates. In the second half of the program, enrollments were predominantly in semester based certificate programs at colleges, proprietary schools, and regional vocational technical schools.

Phase Three of the North Central training program, in which participants selected courses fulfilling their individualized employability plans, began in February 1996, a month past the prevalent spring semester start in colleges and regional vocational-technical schools. The initial enrollments were at an employer-sponsored technical institute.

Employer involvement in the design of curricula increased the relevancy of training, improved the delivery of training, and boosted participants' motivation.

The North Central REB staff partnered with the local technical school, a community college and the North Central Plastics Council, in the design and implementation of the training program, Women in Plastics. The curriculum met the expressed needs of industry representatives. Mold making, computer processing, and CAD/CAM were included in the curriculum. Current topics such as ISO 9000, the European quality control standard, were covered in the curriculum. Many employers guest lectured. The participants expressed their appreciation of the hands-on training.

Training focused on occupations and industries which had favorable employment outlooks and paid living wages which contributed to the high entered employment rates of program participants.

Twenty-two women in the Metro South/West program entered employment at an average hourly wage of \$10.59 with benefits. Seventy-nine percent of the Metro South/West participants obtained employment compared to fifty-five percent of the non-participants.

Twenty graduates of the North Central Massachusetts program entered employment at an average hourly wage of \$9.50. The sixty-seven percent entered employment rate compared favorably with the forty-seven percent rate of non-participants enrolled in other Title II-A JTPA (Job Training Partnership Act) classroom training. In addition, eight women graduates retained their employed status resulting in a program employment rate of eighty-four percent.

Multiple job search methods and intermediaries were used to secure employment.

The grant proposal was vague about job search methods and placement intermediaries. Relatively little information was included about coordination and collaboration of job placement efforts. A self-directed job search was assumed.

Two of the three North Central Massachusetts participants who obtained employment after the program started subsequently were laid off because of slack work. These unsuccessful placements combined with women with no work history and five welfare recipients with limited work history suggested a need for a more organized job search which was implemented by the North Central Massachusetts Regional Employment Board.

Multiple job search methods were used by North Central participants. One participant secured her job by applying directly to a plastics employer. Another participant found employment at a plastics company at which a guest speaker was employed. Two women gained employment at a plastics company at which a mentor worked. Three participants reported finding jobs through newspaper advertisements and one through the referral of a friend.

Training institutions and the employment service provided job leads, particularly for the nontraditional occupations. Ten graduates of the Metro South/West program employed in nontraditional occupations earned an average hourly wage of \$9.80. The five North Central graduates employed in non-traditional occupations earned an average hourly wage of \$9.95.

Training programs were beneficial to workers employed part-time, employed at temporary help agencies or facing layoffs.

Two Metro South/West women employed part-time upon enrollment increased their average weekly wages over twenty percent to \$8.00 with workweeks of 30 to 40 hours respectively.

In the North Central program four participants were employed part-time upon enrollment. Three women found full-time employment upon training completion. They increased not only the number of hours they worked, but also their average hourly earnings, almost ten percent to \$7.87.

Two employed women who entered the North Central program faced layoffs and subsequently lost their jobs. Continuing with the training, they regained employment as an electrical solderer at \$6.50 per hour and as an applications engineer at \$35,000 per year.

Intensive follow-up increased retention and increased “entered employments” and “employability enhancements”, reportable on the Job Training Partnership Act reporting system.

A case manager in the Metro South/West service delivery area was assigned to monitor and follow-up participants. At the fifty-two week follow-up, three women who had completed four quarters of employment had received post-placement wage increases.

The Women in Plastics Program provided intensive follow-up and tracking. A REB staff member initiated ardent follow-up by mail and telephone. This aggressive follow-up captured wage increases received by participants. At the fifty-two week follow-up, seven women had received post-placement wage increases.

Introduction

This program, *The Workforce of the Future: Women in Nontraditional Occupations*, was designed for a grant received by the Executive Office of Economic Affairs and the Massachusetts Division of Employment and Training from the Women's Bureau of the United States Department of Labor to develop programs to expand occupational opportunities for women.

The program brought together a unique coalition of state agencies, private sector partners, and community-based organizations to focus training and employment efforts and support services on women in nontraditional occupations. The coalition focused on developing strategies to help women obtain the skills to become competitive in an increasingly changing workforce.

The collaboration included the Division of Employment and Training (the state employment service), the Bay State Skills Corporation's Center for Women, Work and Family (a quasi public employment and training agency), Women in the Building Trades (a private non-profit agency promoting women in nontraditional occupations), the Massachusetts Occupational Information Coordinating Committee (the state SOICC), the Industrial Services Program (the state Job Training Partnership Act Title III agency for displaced workers), the Metro South/West Workforce Development Career Center (a nonprofit JTPA Title II service delivery agency for disadvantaged job seekers), and the North Central Massachusetts Regional Employment Board (the non-profit workforce development investment council in north central Massachusetts).

Approximately sixty women were trained through the program. The program was implemented in two distinct geographical, industrial, and demographic regions of the state: Metro South/West and North Central Massachusetts.

The Metro South/West area is an urban/suburban area adjacent to Boston, with a diversified industrial base and a relatively low unemployment rate compared to other regions of Massachusetts. Composed of a mobile, largely white-collar and high wage blue-collar work force, the Service Delivery Area (SDA) had the lowest unemployment rate (3.7%) in Massachusetts in 1995. Services, the largest industry sector, accounted for one-third of all jobs. Computer and data processing workers comprised twelve percent of service industries employment. About one-quarter of the 1995 employment was in the trades sector. Three percent of employment was in the construction industry. Women were underrepresented in precision production, craft and machine operating positions.

The area is criss-crossed with limited access superhighways from north to south and east to west. Three commuter rail lines transport workers to Boston. The training component in this area was built on an existing training model and included a unique program design of customized, individualized referrals to nontraditional training for women.

The North Central Massachusetts region, an urban/rural area located in central Massachusetts surrounding three mature cities, has traditionally been known for its manufacturing base which has suffered devastating losses in recent years. The largest industry sector, manufacturing, employed over one-fourth (28%) of the area's workers in 1995, followed by the services industries (24%). The trade sector provided employment to over one-fifth of the region's workers. Plastics, a vital component of the area's economy, employed over one-fourth of the region's manufacturing workers in 1995. The combined employment of workers in plastics materials and synthetics (SIC 282) and rubber and miscellaneous plastics products (SIC 30) industries in north central Massachusetts represented over nineteen percent of statewide industry employment. The 1995 SDA unemployment rate of 5.7% was higher than the Massachusetts unemployment rate (5.4%). This was the seventh highest rate of the state's sixteen service delivery areas. The female per capita income was lower than the statewide average and the number of female heads of household living below the poverty level was substantially above the statewide average. Women were underrepresented in technical, precision production and machine operating positions.

The region has one limited access highway east to west and two partial north-south highways. There is one commuter rail to Boston. The most northern portion adjacent to New Hampshire lacks limited access highways and public transportation. The North Central Massachusetts component for this program featured a new group training program, providing women with customized training designed to teach them a variety of transferrable skills and to prepare them to work in nontraditional occupations in the plastics industry.

This report offers a close examination of the Massachusetts Women in Nontraditional Occupations program, analyzing the experiences of its two components. The experience holds important lessons for others as they conceptualize and implement community-wide strategies to recruit and retain women in nontraditional careers. The report also provides an extensive list of recommendations for training and placing women in nontraditional programs. We hope this report will be a useful resource for practitioners and policymakers as they work to improve the training opportunities and job prospects for women.



The Participants

The Participants

The majority of participants in both the Metro South/West (MSW) and the North Central Massachusetts (NCM) Service Delivery Areas were between the ages of 30-39 (43% and 42% respectively), followed by the age cohort 40-54 (21% and 35% respectively). In both settings, the participants were predominantly white, non-hispanic (82% and 74% respectively). Four out of five participants in both SDAs completed high school or attended post-secondary education. Greater than sixty percent had recent or current employment. A much higher share of the participants in the Metro South/West SDA were unemployed (46%) compared to the North Central SDA (13%). Conversely, only eighteen percent of the MSW participants were employed compared to over half (58%) of the North Central Massachusetts participants.

The socioeconomic histories of the participants differed. Participants in the Metro South/West project were more likely to be Aid to Families with Dependent Children (AFDC) recipients, economically disadvantaged, or single head of households. Eighty-six percent of the MSW participants were classified as economically disadvantaged compared to thirty-six percent of the North Central enrollees. Almost two-thirds of the MSW enrollees were single heads of household compared to just under one-third of the NCM participants. The single heads of household were predominantly high school graduates (average grade: 12, MSW and 12, NCM) and in their mid thirties (average age: 34, MSW and 35, NCM). Individuals with disabilities were more prevalent in the Metro

South/West project (21% versus the North Central's three percent). The Metro South/West enrollees were less likely to be members of minority groups (18% versus 26%) and limited English speaking (4% versus 7%) than North Central participants.

	METRO SOUTH WEST SDA		NORTH CENTRAL MA SDA	
	Number	Percent	Number	Percent
TOTAL PARTICIPANTS	28	100	31	100
FEMALE	28	100	31	100
AGES 22 - 29	9	32	7	23
AGES 30 - 39	12	43	13	42
AGES 40 - 54	6	21	11	36
AGES 55 - OVER	1	4	0	0
WHITE (Not Hispanic)	22	82	23	74
MINORITY SUBTOTAL	5	18	8	26
BLACK	2	7	3	10
HISPANIC	2	7	3	10
AMERICAN INDIAN/ALASKAN	1	4	0	0
ASIAN OR PACIFIC ISLANDER	0	0	2	7
SCHOOL DROPOUT	6	21	3	10
STUDENT (HS OR LESS)	0	0	0	0
HIGH SCHOOL GRAD OR EQUIV	17	61	17	55
POST HIGH SCHOOL ATTENDEE	5	18	11	36
UNEMPLOYED	13	46	4	13
LONG TERM (15+)	11	39	2	7
EMPLOYED	5	18	18	58
NOT IN LABOR FORCE	10	36	9	29
WELFARE RECIPIENT	11	39	7	23
AFDC	11	39	7	23
GENERAL ASSISTANCE	0	0	0	0
REFUGEE ASSISTANCE	0	0	0	0
FOOD STAMP RECIPIENT	1	4	0	0
SSI RECIPIENT	0	0	0	0
UI CLAIMANT	8	29	1	3
UI EXHAUSTEE	0	0	3	3
LIMITED ENGLISH	1	4	2	7
DISABILITIES	6	21	1	3
OFFENDER	2	7	0	0
ECONOMICALLY DISADVANTAGED	24	86	11	36
SINGLE HEAD OF HOUSEHOLD	17	61	10	32
VETERAN	1	4	1	3
PUBLIC HOUSING RESIDENT	4	14	0	0

The Crafts, Repair and Technologies Program in South Suburban Boston

Participants in the Metro South/West nontraditional occupations for women project were only slightly older than female SDA registrants not enrolled in the project. Although the age difference was minimal, nontraditional opportunities (NTO) participants indicated that both maturation and prior work experience had influenced their choice to participate in the project. A slightly higher percentage of NTO participants were white.

Participants were less likely to have attended post secondary education than non-participants. Eighteen percent of the NTO enrollees had received some formal education beyond high school versus over thirty-one percent of the non-NTO participants.

MSW participants were more likely to have participated in the labor force than non enrollees. Thirty-six percent of the initial NTO project participants were not in the labor force compared to over forty-three percent of non-NTO enrollees. Forty-six percent of the women in the NTO project were unemployment insurance claimants compared to forty-three percent of non-NTO enrollees. Enrollees in the Metro South/West NTO project were less likely to be welfare recipients than

non-NTO registrants. About forty percent of the NTO participants were welfare recipients versus almost sixty-five percent of non-participants.

A greater percentage of NTO participants were disabled or offenders than non-NTO enrollers. Twenty-one percent of NTO participants had disabilities versus twelve percent of non-participants. Seven percent of NTO enrollees were post offenders, more than three times the non-NTO percentage of two.

Women in Plastics in North Central Massachusetts

The North Central Massachusetts participants in the Women in Plastics project were somewhat older than the female SDA registrants who did not enroll. The percent of mid-life women aged 40-54 (36%) enrolled in the Project was more than twice that of non-NTO enrollees (17%). Participants in the North Central NTO project were somewhat more likely to be members of a minority group. Almost twenty-six percent of the NTO participants were classified as minority, more than twice the eleven percent of non-NTO enrollees. Twice the number of NTO participants (36%) had received post-secondary education as the remaining registrants (17%).

Participants in the NTO project were more likely to be participating in the labor force than non-NTO enrollees. Twenty-nine percent of the NTO participants were not in the labor force, substantially less than the almost forty-seven percent of the non-enrollees. Enrollees in the NTO project were less likely to be welfare recipients than non-participants (23 percent versus 40 percent). Participants in the North Central NTO project were less likely to have claimed unemployment insurance (13% versus 27%).

Only thirty percent of the project's participants were economically disadvantaged compared to nearly all of the non-enrollees. Similarly, the percentage of single heads of households enrolled in the NTO project (32%) was one-half of the non-NTO participants (64%).

	METRO SOUTH WEST SDA		N. CENTRAL MA SDA	
	NT0	OTHER	NT0	OTHER
TOTAL PARTICIPANTS	27	232	31	144
FEMALE	27	232	31	144
AGES 22 - 29	9	82	7	58
AGES 30 - 39	12	99	13	58
AGES 40 - 54	5	45	11	24
AGES 55 - OVER	1	6	0	4
WHITE (Not Hispanic)	22	182	23	128
MINORITY SUBTOTAL	5	50	8	16
BLACK	2	29	3	5
HISPANIC	2	16	3	10
AMERICAN INDIAN/ALASKAN	1	0	0	0
ASIAN OR PACIFIC ISLANDER	0	5	2	1
SCHOOL DROPOUT	5	26	3	4
STUDENT (HS OR LESS)	0	1	0	0
HIGH SCHOOL GRAD OR EQUIV.	17	132	17	115
POST HIGH SCHOOL ATTENDEE	5	73	11	25
UNEMPLOYED	12	100	4	59
LONG TERM (15+)	11	71	2	34
EMPLOYED	5	31	18	18
NOT IN LABOR FORCE	10	101	9	67
WELFARE RECIPIENT	11	150	7	57
AFDC	11	149	7	57
GENERAL ASSISTANCE	0	1	0	0
REFUGEE ASSISTANCE	0	0	0	0
FOOD STAMP RECIPIENT	1	14	0	22
SSI RECIPIENT	0	8	0	9
UI CLAIMANT	8	30	1	32
UI EXHAUSTEE	0	9	3	7
LIMITED ENGLISH	1	20	2	3
DISABILITIES	6	28	1	16
OFFENDER	2	5	0	1
ECONOMICALLY DISADVANTAGED	23	230	11	143
SINGLE HEAD OF HOUSEHOLD	17	168	10	92
VETERAN	1	0	1	1
PUBLIC HOUSING RESIDENT	4	88	0	0

The Massachusetts Response Form

One-third of the individuals enrolled in the Metro South/West SDA and one-half of the individuals enrolled in the North Central SDA returned their Reaction Forms by January, 1996. One hundred percent expected to be better informed about transferrable and job search skills. Ninety percent expected to be more knowledgeable about specific job skills and job retention skills. The women believed in equity in occupations, industries and wages. All twenty-five respondents believed that women should earn the same wages as comparably qualified men. Ninety percent of the respondents expressed belief in strong work ethics: very hard work, self-management, and reasonable job structure. However, there was less consensus on the availability of job options and the utility of multiple strategies for task completion. Eighty percent of the respondents agreed that there were many different options for employment and that there was more than one way to complete a job.

Eighty percent believed that pathways existed to solve problems and that they had the mental energy to pursue their goals. However, only sixty percent of the women definitely agreed with the statement "I've been pretty successful in my life." In summary, the women were similar in their responses to individuals who focused on succeeding rather than failing and who perceived that they would obtain their goals. All of the respondents indicated that they were more optimistic about their future than one year ago. Eighty percent of the responses defined the term: non-traditional occupation. The largest number described it as an occupation with more men than women, followed by the definitions: not usually for women and not customary for women.

Over one-half the respondents indicated that they participated in the program to obtain specific occupation/industry skills. Forty percent replied that they selected the training because they were interested in

the subject matter. Three women volunteered that they were in the program to further their education. About sixty percent of the volunteered concerns were economic: wages and benefits.

A series of open-ended questions asked the women to visualize their work in two years. Most items were completed with responses ranging from detailed to vague. Ninety percent of the respondents named Massachusetts as the state in which they expected to work. (The three women working in New Hampshire did not respond to the survey). One respondent expected to be working outside the state. Many respondents were uncertain if they would be working in a city or a suburb. Nevertheless, one-half named a location in which they would like to work. Sixty percent indicated a preference to work indoors. Seventy percent stated a preference for specific hours. Eighty percent anticipated working with tools and sixty percent working with machinery. Less than one-third expected to be using computers or office equipment. The majority were unsure how many pounds they would be required to lift on the job. Seventy percent of the respondents expected to be working with customers and co-workers. One-half anticipated working with suppliers.

Ninety percent responded to the question on expected earnings. The desired Metro South/West average hourly wages ranged from \$12 to \$50, with an average of \$22 and a mode of \$15. The North Central respondents anticipated average hourly wages ranging from \$9 to \$20, with an average of \$14 per hour and a mode of \$15. As the Metro South/West project hoped to place twenty-three women in nontraditional occupations with a starting wage between \$9 and \$21 per hour plus benefits and the North Central projected placing twenty-three women with entry wages between \$7 to \$10 per hour with benefits, at least two participants' expectations were high. Almost sixty percent of the respondents indicated that they did not know if they would be union members in two years.

PARTICIPANT'S COMMENTS

- *I need to update my skills & educate myself, so that I am more marketable*
- *I need support and encouragement*
- *I need confidence*
- *I have bad legs. I am permanently disabled.*
- *I hope to get a better understanding of how to get ahead in my future career*
- *I hope to better myself and my son's life*
- *I hope I have enough confidence to tackle a new job*
- *I hope to be treated fairly when I am applying for a job*

Summary of the Evaluation of the Reaction Form

EXPECTATIONS

- 100 percent of those who completed the Reaction Form expected to be better informed about transferrable and job search skills
 - 100 percent of the respondents believed that women should earn the same wage as comparably qualified men.
 - 90 percent expected to be more knowledgeable about specific job and job retention skills.
 - 90 percent of the respondents believed in strong work ethics: very hard work, self-management, and reasonable job structure.
 - 80 percent of the respondents agreed that there are many different options for employment and that there is more than one way to complete a job.
-

VISIONS OF THE FUTURE

- 100 percent of the respondents indicated that they were more optimistic about their future than they were one year ago.
 - 90 percent of the respondents expected to work in Massachusetts.
 - 80 percent of the respondents believed that pathways existed for them to solve problems and that they had the mental energy to pursue their goals.
 - 80 percent visualized working with tools and 60 percent working with machinery.
 - Only 60 percent definitely agreed with the statement "I've been pretty successful in my life."
 - Less than 30 percent expected to use computers or office equipment on the job.
-

Massachusetts Reaction Form

LOCATION: _____ LAST 4 DIGITS OF SOCIAL SECURITY NUMBER: _____

Please complete and give to the counselor/facilitator.

Question One: As a result of your participation in this training workshop, do you expect to be better informed on the following topics? (Indicate all that apply)

1. Transferrable Skills	YES	NO	DON'T KNOW
2. Job Specific Skills	YES	NO	DON'T KNOW
3. Job Search Skills	YES	NO	DON'T KNOW
4. Job Retention Skills	YES	NO	DON'T KNOW

Question Two: Do you have specific goals and expectations of outcomes from this training?

Please respond to the following open-ended questions.

I am here to _____

I selected this training because _____

I hope to get from this training _____

My main job concerns at this point are _____

The term: non-traditional occupation means _____

I am more optimistic about my future than I was one year ago. YES NO DON'T KNOW

Massachusetts Reaction Form

LOCATION: _____ LAST 4 DIGITS OF SOCIAL SECURITY NUMBER: _____

1. In two years, I will be working in _____ (name of state)

2. A. In two years, I will be working in downtown _____ (name of city) or

B. In two years, I will be working in on office park _____ (name of suburb, commuting area).

3. A. In two years, I will be working outdoors. YES NO DON'T KNOW

B. In two years, I will be working inside a building. YES NO DON'T KNOW

4. In two years, I expect to be working the following hours: from _____ to _____.

5. A. In two years, I will be working with office equipment. YES NO DON'T KNOW

B. In two years, I will be working with computer equipment. YES NO DON'T KNOW

C. In two years, I will be working with machinery. YES NO DON'T KNOW

D. In two years, I will be working with tools. YES NO DON'T KNOW

6. In two years, I will be performing physical tasks requiring the lifting of _____ pounds. DON'T KNOW

7. In two years, I will be keeping records and writing reports. YES NO DON'T KNOW

8. In two years, I will be working with the following types of people:
customers YES NO DON'T KNOW

suppliers YES NO DON'T KNOW

co-workers in a team YES NO DON'T KNOW

9. In two years, I will be using the following skills on the job:

10. In two years, I expect to be earning \$_____ per hour. DON'T KNOW

11. In two years, I will be a member of a union. YES (name of union) NO DON'T KNOW

Massachusetts Reaction Form

LOCATION: _____ LAST 4 DIGITS OF SOCIAL SECURITY NUMBER: _____

Question Three: Do you agree or disagree with the following statements?

Please circle the response which most closely corresponds to your point of view.

Directions: Read each item carefully. Using the scale shown below, circle the number which best describes your belief.

1=Totally Disagree

2=Mostly Disagree

3=Disagree somewhat

4=Agree somewhat

5=Mostly Agree

6=Totally Agree

1. People who work very hard will be rewarded.	DISAGREE	1	2	3	4	5	6	AGREE
2. Everyone has many different options for employment.	DISAGREE	1	2	3	4	5	6	AGREE
3. Self-management is critical to job success.	DISAGREE	1	2	3	4	5	6	AGREE
4. A reasonable amount of job structure is necessary.	DISAGREE	1	2	3	4	5	6	AGREE
5. Women should earn the same wage as comparably qualified men.	DISAGREE	1	2	3	4	5	6	AGREE
6. Individuals should be able to work at any occupation for which they are qualified.	DISAGREE	1	2	3	4	5	6	AGREE
7. Individuals should be able to work in any industry for which they are qualified.	DISAGREE	1	2	3	4	5	6	AGREE
8. There is more than one way to complete a job.	DISAGREE	1	2	3	4	5	6	AGREE

Massachusetts Reaction Form

LOCATION: _____ LAST 4 DIGITS OF SOCIAL SECURITY NUMBER: _____

Question Four: Do you agree or disagree with the following statements?

Please circle the response which most closely corresponds to your point of view.

Directions: Read each item carefully. Using the scale shown below, circle the number which best describes your belief.

1 = Definitely Disagree

2 = Mostly Disagree

3 = Mostly Agree

4 = Definitely Agree

1. I can think of many ways to get out of a jam.	DISAGREE	1	2	3	4	AGREE
2. I energetically pursue my goals	DISAGREE	1	2	3	4	AGREE
3. I am concerned about sexual harassment on the job.	DISAGREE	1	2	3	4	AGREE
4. There are lots of ways around any problem.	DISAGREE	1	2	3	4	AGREE
5. I am concerned about my future.	DISAGREE	1	2	3	4	AGREE
6. I can think of many ways to get the things in life that are important to me.	DISAGREE	1	2	3	4	AGREE
7. I worry about my income.	DISAGREE	1	2	3	4	AGREE
8. Even when others get discouraged, I know I can find a way to solve the problem.	DISAGREE	1	2	3	4	AGREE
9. I've been pretty successful in my life.	DISAGREE	1	2	3	4	AGREE
10. I meet most of the goals that I set for myself.	DISAGREE	1	2	3	4	AGREE

Massachusetts Response Form

Over one-fourth of the individuals enrolled in the Metro South/West (MSW) Service Delivery Area and one-third of the individuals enrolled in the North Central SDA had returned their Response Forms by June 1996. The participants responded by rating statements on a six point scale: Totally Disagree, Mostly Disagree, Disagree Somewhat, Agree Somewhat, Mostly Agree, Totally Agree.

The Crafts, Repair and Technologies Program in South Suburban Boston

Seven participants in the Metro South/West SDA training program expressed their post-training job placement aspirations in response to statements and open ended questions. The Metro South/West respondents concurred that training helped workers find employment. Four participants strongly agreed with that statement. As a group, the respondents mostly agreed that training should lead to a full-time job as opposed to part-time work. Three women totally agreed with the statement and one somewhat disagreed. Their definitions of full-time employment ranged from thirty to eighty hours per week, with an average of thirty-five hours. This is slightly higher than the 1995 average American workweek of 34.5 hours. The women totally agreed that post-training wages should be adequate which they defined as entry pay ranging from \$6 to \$50 per hour, with an average hourly wage of \$9.40. [This hourly wage was somewhat lower than the 1995 average hourly wage of \$11.46 paid to United States workers.]

The MSW respondents definitely concurred that post-training employment should provide decent job benefits which they described as health insurance, pension, paid holidays, sick leave and vacation leave. [Three-fourths of the displaced workers in Massachusetts between 1991 and 1994 received medical insurance at their new job upon reemployment. Only about sixty percent of the reemployed dislocated workers received pensions at their new jobs.] The respondents unanimously agreed that the post-train-

ing job should offer acceptable working conditions. Their desired starting times ranged from 5 A.M. to 9:00 A.M.. The preferred quitting times extended from 11 A.M. to 6 P.M. None of the respondents expressed the desire for third shift work. The respondents totally affirmed that the post-training job should be within a reasonable commuting distance which ranged from zero to sixty miles, with an average commute of twenty miles. [The commuting distance was higher than the nine miles averaged by the 7,750 reemployed Massachusetts Title III dislocated workers who had been laid off between January 1991 and September 1994.] Six of the seven respondents totally agreed that the post-training job should offer job security. Five defined job security as ranging from three to ten years with a mode of three years with the same employer. All respondents totally agreed that post-training employment should offer advancement opportunities including promotions and tuition reimbursement.

Women in Plastics in Central Massachusetts

Ten participants (one-third of the enrollees) from the North Central SDA training program responded to questions on job characteristics. The respondents mostly agreed that training helped workers obtain employment. Four women totally agreed with the statement and two disagreed somewhat. The respondents somewhat concurred that the training should lead to a full-time job. Two respondents totally agreed with the statement and one woman mostly agreed. The respondents totally agreed that the post-training job should offer full-time employment, with preferences ranging from twenty to sixty hours, with an average of thirty-eight hours per week. The respondents totally affirmed that the post-training job should pay an adequate wage with individual preferred entry wages ranging from \$8 to \$20 per hour, with a mode of \$8 and an average hourly wage of \$10. This wage was close to the \$10.24 paid in 1995 to plastics industry employees in the United States.

Respondents totally concurred with the statement that the post-training job should offer decent benefits. Benefits mentioned included health, long term disability, pension, 401K, vacation leave, and profit sharing. All respondents strongly felt that the post-training job should offer acceptable working conditions. Acceptable starting hours were defined as between 7:00 A.M. and 8:00 A.M. with quitting times between 3:00 P.M. to 6:00 P.M. Again, none of the women expressed a preference for third shift hours. The respondents were unanimous that the post-training employment should be within a reasonable commuting distance from their home. The women defined a reasonable commute as from zero to thirty-five miles. The respondents offered different definitions of job security. Seven women felt strongly that the job should offer employment security; whereas, three women only agreed somewhat about the need for job security. Four defined job security as at least ten years employment with the same employer with vested pension rights. Two felt that job security was at least three years employment with the same employer. Three other women described job security as the possession of skills and knowledge desired by many employers. [The over 18,000 Massachusetts dislocated workers between 1991 and 1994 had an average job tenure of almost eight years.] Nine women totally agreed with the statement that the post-training job should offer career advancement opportunities. One woman mostly disagreed with the statement. The nine who agreed with the statement included promotional opportunities and tuition reimbursement as part of their definition of career advancement. Seven women added in-service training and six noted cross-training.

PARTICIPANT'S COMMENTS

- *I need a secure job and to make good money*
- *Get the best pay and benefits for me*
- *Advancement opportunity is supervisory status*
- *Decent benefits include child care and paid maternity leave.*

Massachusetts Response Form

LOCATION: _____ LAST 4 DIGITS OF SOCIAL SECURITY NUMBER: _____

Question Two: Do you agree or disagree with the following statements?

Please circle the response which most closely corresponds to your point of view.

Directions: Read each item carefully. Using the scale shown below, circle the number which best describes your belief.

1=Totally Disagree

2=Mostly Disagree

3=Disagree somewhat

4=Agree somewhat

5=Mostly Agree

6=Totally Agree

1. Training helps workers find jobs _____ DISAGREE 1 2 3 4 5 6 AGREE
Knowledge of _____, _____, and _____ helps workers find jobs.

2. Training should lead to a full-time job as opposed to part-time work. _____ DISAGREE 1 2 3 4 5 6 AGREE

3. The post-training job should pay an adequate wage. _____ DISAGREE 1 2 3 4 5 6 AGREE
An adequate wage ranges from \$_____.00 per hour to \$_____.00 hour.

4. The post-training job should offer decent job benefits. _____ DISAGREE 1 2 3 4 5 6 AGREE
Decent job benefits include _____

5. The post-training job should offer acceptable working conditions. _____ DISAGREE 1 2 3 4 5 6 AGREE
Acceptable working hours are from _____ A.M. to _____ P.M.

6. The post-training job should be within reasonable commuting distance. _____ DISAGREE 1 2 3 4 5 6 AGREE
A reasonable commuting distance ranges from _____ miles to _____ miles and takes from _____ minutes to _____ minutes to travel.
A reasonable commute is on public transportation _____ YES _____ NO.
A reasonable commute includes car pooling _____ YES _____ NO.

7. The post-training job should offer job security. _____ DISAGREE 1 2 3 4 5 6 AGREE
Job security is at least ten years employment with the same employer _____ YES _____ NO;
at least three years employment with the same employer _____ YES _____ NO;
union membership _____ YES _____ NO;
skills/knowledge desired by many employers _____ YES _____ NO.

8. There is more than one way to complete a job. _____ DISAGREE 1 2 3 4 5 6 AGREE
Advancement opportunities include promotion opportunities _____ YES _____ NO;
tuition reimbursement _____ YES _____ NO;
in-service training _____ YES _____ NO;
cross-training _____ YES _____ NO;
Other _____ (name)



Recruitment

Recruitment

The impact of the distinctive designs of each service delivery area training program on recruitment efforts was substantial.

The Crafts, Repair and Technologies Program in South Suburban Boston

The Metro South/West Service Delivery Area (SDA) offered customized, individualized referrals to institutions offering training for nontraditional occupations. The Metro South/West recruitment design included participants from the Pathways Program, a vocational, educational training program for women at the Massachusetts Correctional Institution (MCI) in Framingham. In addition, the SDA planned to recruit potential participants from the Department of Transitional Assistance (Public Welfare), the Displaced Homemakers Program and the Massachusetts Rehabilitation Commission. The Metro South/West training program targeted women 22 years and older whose assessments demonstrated interest and aptitude for nontraditional training. From the initial planning stages, the Metro South/West SDA decided to use the assessment process as a recruitment tool. The program planned to expand recruiting area including the surrounding service delivery areas: South Coastal, Metro North and Brockton. The recruitment pool was expanded to non-JTPA sources such as the Department of Education and the Department of Higher Education and their affiliated educational institutions. Responsibility for outreach, promotional efforts and recruitment was assigned to a full-time Nontraditional Case Manager/Counselor.

The Nontraditional Case Manager/Counselor reviewed applications at the Metro South/West Career Center to identify appropriate candidates such as women who did not want a desk job, liked to move around, created home crafts, and had good spatial perception (as identified by assessment). The case manager identified potential recruitment resources such as SDA intake, the Division of Employment and Training

(DET), other employment and training agencies, training institutions, posters, fliers, newsletters, and community networks. The case manager informed community based organizations such as the Southern Middlesex Opportunity Center and public assistance offices about the training program. In June, the Case Manager/Counselor met with admissions recruiters of schools with nontraditional training programs such as New England School of Technology, Middlesex Community College, Boy State School of Appliances, and Assabet, Keefe, Blue Hills, Tri-county, and Minuteman Regional Vocational Technical Schools to seek their assistance in recruiting interested women who needed financial assistance for nontraditional training. Four women were identified as potential recruits, resulting in reverse referrals from the schools to the training sponsor.

The initial flier used for recruitment advertised "If you are a female 22 years or older, you may be eligible for training in careers such as automotive technology, electrical apprenticeship, construction apprenticeship, carpentry, lab & electronic technologies, small appliance repair, and heating, ventilation, air-conditioning". The Division of Employment and Training publicized the project in its offices outside of the Metro South/West Service Delivery Area, but in close proximity to the SDA. A second flier, *Women's Work*, printed by the Division of Employment and Training stated: "Training is now available at no cost (if eligible) to women age 22 and older in occupations traditionally filled by men — and traditionally paying higher wages. Train for a career as an electrician, plumber, auto mechanic, carpenter, lab technician, and appliance repairperson ... These are just a few of the occupations that you can train for as part of *Workforce of the Future: Women in Nontraditional Occupations*. If you are currently receiving Aid to Families with Dependent Children or Unemployment Insurance benefits, you may be eligible to continue receiving your benefits while you are in training".

Because of the planned individual referrals to specific nontraditional occupational training, the recruitment schedule was staggered. R.E.T.S. (Radio, Electronics

and Television) Electronics School had open enrollment with classes starting on Mondays. Other proprietary institutions offered monthly openings. The majority of post-secondary schools had semester scheduling such as Minuteman Regional Vocational Technical School and Clark University, with most courses beginning in September or January. The enrollment period extended from September, 1995 through September, 1996. Ten individuals were enrolled in September and five in October of 1995. These fifteen participants attended training programs at three institutions: Assabet Valley Regional Vocational Technical School, Boy State School of Appliances, and TAD Technical Institute. Four additional individuals enrolled in November, attending programs at Boy State School of Appliances, Clark University, International Telephone & Telegraph (ITT) Technical Institute, and TAD Technical Institute, increasing the number of participants to nineteen. The next wave of enrollments began in the winter of 1996 with spring semester admissions. Two women enrolled in January and four in February. Additional enrollments followed at Quincy College, RETS, Clark University, and New England Tractor Trailer School. Twenty-seven recruits were enrolled by the end of April. In September 1996, the twenty-eighth participant entered Clark University.

Recruitment extended outside the Service Delivery Area. Six women were recruited from contiguous service delivery areas: Metro North Service Delivery Area (3), Southern Worcester Service Delivery Area (1), the Boston SDA (1) and the Brockton SDA (1). Two enrollers traveled to the training sites from outside the Greater Boston area (Southern Essex and Lower Merrimack Service Delivery Areas in northeast Massachusetts).

The most fruitful recruitment methods for the Metro South/West SDA were schools, the public assistance agency, and local employment service offices. Nine participants heard of the program from admissions representatives at schools. Six registrants learned of the training program through the welfare department. Fliers and staff of local employment service offices

attracted the interest of five recruits. Three applicants learned of the program from relatives or friends and one from a department of corrections staff member. Accepted applicants did not cite displaced homemakers or vocational rehabilitation agencies as sources of referrals.

In a July 1996 focus group, utilizing the forced relationships of Thomas L. Greenbaum (a leader in focus group research), Metro South/West participants were asked to choose an animal which best represented the recruiting agency. The women selected equally a "bear" and a "lion". The women defined the bear as "powerful" and "they ... get the job done". The "lion" was described as "aggressive, fast, forceful, assertive, warm, compassionate, smart and cunning". When asked to name the color they associated with the intake staff, the women selected "blue" which they described as "very soft (gentle), stately, organized with direct goals, beautiful, sincere" and as "red" defined as "exciting, bold, great, power booster, sharp, clear, and bright".

The Women in Plastics Program in North Central Massachusetts

In the North Central Service Delivery Area, the industry-focused Women in Plastics program was designed as a twelve month intensive group training program for women who were interested in pursuing a plastics career. The goals for participants were transferable skills and basic occupational competencies. In the grant technical proposal, the North Central SDA expressed its intention to recruit women aged 22 and older. The SDA proposal stated that the program would be marketed at a number of local employment, training and service agencies. The REB Executive Director anticipated referrals from the Department of Transitional Assistance (public welfare), the local Displaced Homemakers Programs, the Massachusetts Rehabilitation Commission, and related agencies.

The North Central Service Delivery Area (SDA) initiated recruitment in early May, 1995. Recruitment fliers and newspaper articles emphasized that the program was designed for women working in or seeking an entry-level position in the plastics industry. Classified advertisements were placed in local newspapers including the Worcester Telegram and the Fitchburg Sentinel. The classified advertisement in the Worcester Sunday Telegram (August 27, 1995) stated "women age 22 and older who are interested in entering or advancing in plastics careers". In an article in the Fitchburg Sentinel (June 19, 1995), the Executive Director of the North Central Regional Employment Board identified the program as a "curriculum aimed at women who want to enter the plastics field or who are already employed in the plastics industry and want to advance". The training program was further described as "classes in module form in order to allow students to pick and choose the areas in which they want to concentrate. Planned topics include quality control, purchasing and sales, introduction to machine technology and mold polishing". In an article in the Boston Globe (May 9, 1995), the Executive Director explained "The Leominster program has no income or residence requirements.... Applicants need at least 10th grade reading level and ability to handle basic algebra". As of July 15, 1995, twenty women had expressed an interest in participating in the training program and were placed on a waiting list to be interviewed and assessed. Sixteen additional women responded to the newspaper coverage. In September, fifty-four women attended an open house for the Women in Plastics Career program at the Leominster Center for Technical Education. Of the thirty-seven who expressed continuing interest, thirty-one women were accepted and the remainder were placed on a waiting list. An acceptance letter from the Director of Customer Services of the North Central Regional Employment Board, was sent to each of the thirty-one accepted applicants. Letters of provisional acceptance with an enclosed syllabus and directions to the Leominster Center for Technical Education were sent to those on the waiting list. All of the accepted applicants reported for training.

Recruitment extended outside the Service Delivery Area. Four recruits commuted from outside the state: three from New Hampshire and one from Connecticut. Six women were recruited from the adjacent Southern Worcester Service Delivery Area. The Executive Assistant to the Regional Employment Board wrote a letter to the Director of the adjacent service delivery area informing him of the interest of six residents in the Women in Plastics Program and requesting his signature on an attached permission form. These applicants were accepted to the program. Recruitment fliers were distributed to community and employment and training agencies. Recruitment efforts included the successful solicitation of participants through employment and training agencies including the Service Delivery intake (3) the state welfare department (1) and the state employment service (1). The cooperation of area companies proved to be extremely effective in the recruitment of candidates. Of nine women recruited from plastics companies, five were introduced to the program by postings at their work site. Two recruits were informed of the training program by their human resources department and another by a co-worker. One woman learned of the program from her sister who read the newspaper advertisement. Accepted applicants did not cite displaced homemakers or vocational rehabilitation agencies as sources of referrals.

The most fruitful methods for the North Central SDA were newspaper ads and referrals from employers. The Plastics Technician program began with thirty-one enrollees in October, 1995.

In February 1996, North Central SDA participants in a focus group when asked to select a representative animal, (utilizing Thomas L. Greenbaum's forced relationships concepts) identified the recruiting agency as a "racehorse". The definitions offered by the women for "racehorse" were "fast, disciplined, winning, go-getter, teacher, quick, go for it feeling". Asked to name the color they associated with the intake staff, the women selected "pink" which they described as "feminine, soft, open to women, sweet, nice, classy, organized".

RECOMMENDATIONS

1. Begin the recruitment at least six months in advance of the start of the program.

2. Well in advance of the start of the training program, target employment and training agencies and educational institutions with ample fliers on nontraditional occupations and announcements of planned training.

3. Well in advance of the start of the training program, saturate locations where women congregate (supermarkets, laundromats, beauty salons, fitness centers, etc.) with fliers on nontraditional occupations and announcements of planned training.

4. Well in advance of the start of the training program, conduct informational seminars on nontraditional occupations at secondary schools and employment and training agencies. Include discussions of women's hesitance to participate in nontraditional training and the possible biases and attitudes of significant male influencers.

5. Well in advance of the start of the training program, identify women successfully employed in nontraditional occupations to recruit as potential speakers at open houses and career days and as instructors and guest lecturers.

6. Before the training program starts, inform appropriate staff in local training agencies about the program and distribute adequate fliers.

7. Before the training program starts, distribute fliers on nontraditional occupations to admissions offices of proprietary schools, community colleges, and colleges.

8. Use employers as part of the recruitment process by soliciting referrals of women who need training for career advancement or whom the employer would hire if they had training. Contact existing employers in industries in which nontraditional occupations are prevalent.

9. Survey applications to identify registrants who have expressed an interest in nontraditional occupations. Scan the existing applicant pool for women:

- who do not want a desk job
- who like to move around
- who like hands on work (such as needle point,

knitting, floral arranging, creating ornaments, sewing, cooking)

- who like tangible results

10. Evaluate career assessment results to target women who may be interested in nontraditional occupations.

11. Utilize intake staff as educators about nontraditional occupations and distributors of information on nontraditional occupations.

12. Utilize employment and training agencies such as state employment services to identify women interested in nontraditional occupations and to develop an awareness of nontraditional occupations and training resources in job seekers.

13. Utilize proprietary schools and community colleges to identify individuals interested in training for nontraditional occupations without adequate financial resources. Develop reverse referrals from the schools to the training sponsor.

14. Utilize public assistance agencies and community based organizations to identify women interested in nontraditional occupations and to develop an awareness of nontraditional occupations and training resources.

15. Use paid newspaper ads and newspaper articles to publicize training programs for nontraditional occupations.

16. Provide copy and video clips to local television stations to broadcast the availability of training for nontraditional occupations as part of public service announcements.

17. Use public service announcements (copy and audio tape) and guest appearances on local radio stations to broadcast availability of training for nontraditional occupations.

18. Recruit outside the service delivery area or local office area. Provide outreach to potential commuters within the labor market area and surrounding service delivery areas.

19. Before the inception of the training program, conduct an open house at the training or recruitment site.

20. For selected nontraditional occupations, utilize the literature of professional and trade associations as part of the recruitment effort. Some associations have lists of members available for informational interviewing. Using women employed in nontraditional occupations as recruiters may not be the most viable option. The number of women employed in nontraditional occupations by geographic area is limited. Of those interested, relatively few are able to dedicate adequate time for recruitment due to work schedules, continuing education and family commitments.

21. For future recruitments, conduct ongoing informational seminars on nontraditional occupations at secondary schools and employment and training agencies. Inform teachers and counselors about career related publications using photos and sketches of women working in nontraditional occupations such as the *Young Person's Occupational Outlook Handbook* and the *Children's Dictionary of Occupations*. Provide information on nontraditional occupations to be shared with parents.

22. Develop marketing tools explaining the benefits of the program.

Recruitment Methods

ACTIVITY	NORTH CENTRAL SDA	METRO SOUTH/WEST SDA
Recruitment	Open House at Technical Center September 11 attended by 54 women	nontraditional presentation with every SDA orientation - interviewed 30 by 10/12/95
within SDA	yes	yes
outside SDA	yes outside state: Troy,NH; Rindge, NH; Jaffrey, NH; Woodstock, CN	yes
Recruitment outreach		
through SDA intake	yes SDA client base, Title III, JTPA	case management counselor nontraditional presentation with every SDA orientation
through other agencies	Department of Transitional Assistance, Division of Employment and Training	Department of Transitional Assistance, Division of Employment and Training
through training institutions	no	marketed to all schools that offered nontraditional training and all schools which had contract with SDA
fliers	yes, computer generated at DET, SDA, LCTE, CBO, Network	"Attention: Women" "Women's Work"
newsletters	no	wrote about program in SDA newsletter
networking	referrals by other women	referrals by other women
newspaper articles	paid newspaper ads and newspaper articles: Fitchburg Sentinel, Worcester Telegram, Boston Globe, Worcester Business Journal	no
personal networks	plastics employers school to career networks	community network
other	word of mouth all plastics employers - starting Nypro (2), TRW(2), TFX Medical (3), Cycles (1)	word of mouth
Most fruitful methods of recruitment		
Ranked one	response to newspaper ads (16)	referrals from schools (9)
Ranked two	referrals from employers (8)	welfare department (6)
Ranked three	referrals from Regional Employment Board/SDA (3), employment service office (1) other women (1), welfare (1)	employment service office (5), referrals from other women (3) corrections staff (1)



Retention

Retention

The distinctive designs of the training program of each service delivery area influenced the retention strategies. Three organizations with expertise in nontraditional employment for women partnered with each service delivery area to provide a myriad of support services, including group and individual counseling, mentoring, and assessment. The organizations included:

- *The Industrial Services Program (ISP)*, the JTPA Title III quasi-independent agency for Massachusetts, designed a comprehensive curriculum titled "Choosing a Living Wage" to address issues and barriers to choosing a nontraditional career.
- *The Bay State Skills Corporation (BSSC)*, a quasi-public employment and training agency, provided individual and group support services. The BSSC designed a mentoring program for participants and actively participated in regional counselor/instructor training sessions.
- *Women in the Building Trades (WIBT)*, a private non-profit agency promoting women in nontraditional occupations, provided a self-sustaining support group curriculum addressing sexual harassment prevention, assertiveness training, and health and safety issues. In addition, WIBT provided training to counselors to increase sensitivity to and awareness of the needs of women in nontraditional jobs and participated in regional and statewide counselor/instructor/employer training sessions.

Each agency was committed to developing in women the confidence necessary to acquire and keep nontraditional jobs. All the partners agreed to collaborate in providing training to front-line staff.

The Crafts, Repair and Technologies Program in South Suburban Boston

The Metro South/West Service Delivery Area offered customized, individualized referrals to institutions offering training in nontraditional occupations.

Income eligibility screening criteria targeted low-income earners, welfare recipients, the economically disadvantaged, unemployment compensation recipients, or JTPA eligible. A flier, **Women's Work**, distributed by the Division of Employment and Training stated: "If you are currently receiving Aid to Families with Dependent Children or Unemployment Insurance benefits, you may be eligible to continue receiving your benefits while you are in training".

The Metro South/West SDA offered supportive services for Job Training Partnership Act (JTPA) eligible enrollees. Financial supports included meal allowances (four dollars per training/education day); transportation reimbursement (22 cents a mile), and reimbursement for needed outfitting and essential equipment. The Nontraditional Case Management Counselor co-enrolled eligible participants in JTPA and/or JOBS (public welfare employability program). The costs of the program were shared across several funding sources and agencies and total financial resources were augmented.

General screening criteria required applicants to be at least 22 years of age and to have completed a pre-application interview and the *Individual Services Strategy Form*. Also, the recruit's education and employment history were reviewed by the case manager.

The previously mentioned flier, **Women's Work**, described the range of services offered: "A wide range of supportive services is offered to ensure your success. We know that success requires more than just technical skills, so you'll find a network of support available throughout (and beyond) your training.

Workshops, job counseling and placement assistance will be offered by the Department of Employment and Training, along with industry professionals. Workshops that help prepare you for any barriers you might expect when choosing a nontraditional career, as well as practical information on balancing school, work and family will be offered by the Industrial Services Program. You'll also learn how to communicate effectively in the workplace. Workshops on sexual harassment prevention, assertiveness training and health and safety issues will be provided by Women in the Building Trades. Many women who are already working in your chosen field have volunteered to be mentors. They will be there to answer your questions, give you practical advice, address your concerns and share experiences they have had along the way to a rewarding, good paying career. Your support network will be there to help you find a new job in your chosen field and will be there during your transition."

Following the recruitment process, clients participated in an initial interest and aptitude assessment. Assessment activities included both formal testing and informal assessment through structured interviewing and activities. The proposal indicated that these assessment activities would create a stronger self awareness as well as a clearer identification of occupational interests.

The women underwent intensive assessment using the Systems for Assessment and Group Evaluation (SAGE) at the Keefe Technical School of the Southern Middlesex Regional School to Career area. The SAGE, published by Train-Ease Corporation, matched aptitudes, educational level, work attitudes and temperaments of individuals to the job descriptions of 125,000 *Dictionary of Occupational Titles*. The assessment lasted three and a half hours and involved client participation in twenty-two subtest batteries. The SAGE provided the clients with learning style, vocational interest, and temperament profiles, an aptitude evaluation and a listing of potential jobs by interest area. Twelve of the women were tested by mid-October, 1995. The remainder were not formally

tested because they were sure of their interests and career goals. Over eighty percent of the participants were graduates of high school and four women (14% of the participants) had completed college suggesting sufficient aptitude to complete academic work.

All participants were tested with the Tests of Adult Basic Education (TABE), published by CTB McGraw Hill. The TABE measures basic skills of reading, mathematics, language and spelling normally learned in grades two through twelve. The total administration time was four hours. The average math score was equivalent to the 10th grade level with a range from the fifth to the second half of the twelfth grade. Language scores ranged from the sixth grade to the second half of the twelfth grade, with an average grade equivalent of the second half of the eleventh grade. The mode for both math and languages was 12.9 - a grade equivalent of the second half of the twelfth grade.

The contracting training institutions tested the women as part of the admissions process. The Assabet Valley Regional Vocational Technical School administered an academic assessment test during the fourth week of each month. Candidates for the Bay State School of Appliances were required to pass an entrance examination demonstrating the ability to read and write English. In the instance of the reverse referrals from the training institutions to the training sponsor, the women had already met the admission requirements.

Assessment included a structured interview and a structured self-assessment, including comprehensive research on the occupation to be pursued and school searches on institutions offering training for the selected occupation. Participants received guidance about local labor market conditions and job requirements and outlook. They researched information on available training programs and skill requirements. Each participant completed an occupational research sheet in The Training Proposal and an employability plan: *Individual Services Strategy Part I (Initial)*, and *Individual Services Strategy Part II (Assessment)*. By

December, all women who were enrolled had completed their labor market research on their chosen occupation.

Counseling and Supportive Services

The Nontraditional Case Management Counselor also functioned as an adjustment counselor, working with key staff at the training institutions. Individual counseling was provided by the case manager at the SDA Career Center and at the training institutions. No formal group counseling was provided by the training sponsor although the Deputy Director stated that she would have liked to offer the group feedback and support. The logistical problem of enrollees attending different schools in widespread geographic area was too great.

The relatively few women in a small number of selected nontraditional occupations created a challenge for the Bay State Skills Corporation's efforts to recruit female mentors in ample numbers. In addition, the staggered recruitment of the Metro South/West project created a perceived late project start-up. As early as June 1995, the Bay State Skills Corporation had expressed reservations concerning the difficult combination of staggered enrollments and the need for sufficient numbers of participants to schedule the mentoring training. Efforts had not begun by the end of September, 1995.

In October, the Metro South/West Service Delivery Area contacted the contracted schools for assistance in recruiting mentors for the participants. A contact person at each school was identified as the liaison for the Bay State Skills Corporation's mentor recruitment efforts. The schools continued their search for mentors through November. In March, the nontraditional case manager reported: "There continues to be difficulty in recruiting women for the mentor program. We met with ... from Bay State Skills Corporation to brainstorm on recruiting mentors. We suggested she call our school contacts. On March 19, we sent her a list of our clients, schools they are attending, and a

school contact. She expressed difficulty in recruiting mentors".

During June, the Bay State Skills Corporation conducted mentor training and orientation with two mentors and four students from TAD Technical Institute. The mentors agreed to call each student to arrange individual meetings. By the end of June, three women (1 plumber, 2 auto body repairers) were recruited as mentors, in collaboration with Women in the Building Trades. Each agreed to work with two to three participants as proteges. By the end of July, two additional mentors from the network management field were trained and a meeting was scheduled with three more students. Two women — a plumber and an environmental technician — were identified as possible mentors by the BSSC team.

In September, the BSSC reported on its efforts to find additional mentors: "We have found mentors for those participants who were interested. However, quite a few [participants] did not know about the mentoring component of the project and felt that it was an imposition while others said they just didn't think it was necessary and they had too many other responsibilities at the time". The BSSC team commented "Instituting a mentoring component at the Metro South/West project has been incredibly difficult. There are numerous reasons, many which were unavoidable. The primary problem, though, is one created by the design of the project. Because the participants were enrolled in a number of different training programs, in a variety of locations, not to mention on different schedules, it was nearly impossible to hold meetings with them. We tried to reach them all by phone, but found that our calls were not being returned. We sent letters asking them to expect our calls, but most of the participants said they were unaware that the program had a mentoring component so felt uncomfortable speaking with us. Of course, in a previous report we discussed the difficulties of trying to recruit mentors when we did not and could not know in advance which occupations the participants would choose, and because we had no

prior relationships with the proteges for whom we were expected to find mentors".

Educational remediation was limited to a referral to the General Educational Development Equivalency Diploma (GED) program at Assabet Valley Regional Vocational Technical School.

Support Workshops

The ISP Coordinator in her September report commented on the "difficulty in coordination and scheduling of workshops with Metro South/West SDA. Specific challenges given that participants began training in September and are attending training programs in three different locations. Discussions continue to arrive at a mutually agreeable dates and location." For example, the only time the participants at TAD Technical Institute could meet together was Friday after 3:00 P.M.

At the end of October, the ISP began scheduling workshops to be given on site at the schools. In the BSSC's October report, the coordinator noted "Coordinating workshops for all the clients in training is an ongoing challenge as women are at various schools. Continued flexibility from all partners will ensure that all workshops will be given on location for most clients, and in a timely fashion." The ISP planned to start in November at TAD Technical Institute and Assabet Vocational School. A series of workshops were held between November and December. Three workshops were given by ISP staff to six participants at TAD Technical Institute on Cultural Barriers (11/03/95), The Balancing Act (11/17), Returning to School (including time and stress management, 11/21), and Industry Trends and Opportunities (labor market research, 12/01) during November and early December. The Self Esteem workshop was offered to eight participants at the Boy State School of Appliances on 11/16/95 and at Assabet Valley on 12/05/95. The Communications Strategies workshop was held at Assabet Valley Vocational Technical School in December. In the December report, the ISP

noted "To date, the only roadblock we have faced is the linkage support services (workshops). This is due to the vast territory and locations of the variety of schools providing the training." In the March report, ISP noted that the "ISP completed three workshops at Assabet Vocational School on labor market research, cultural barriers, and communication strategy". Sixteen participants benefited from the workshops. Enrollers at ITT Technical Institute, Quincy College, RETS, Minuteman Vocational Technical School, and Clark University did not participate in ISP sponsored workshops.

Women in the Building Trades (WIBT) scheduled workshops on sexual harassment, health and safety issues, and assertiveness training at Assabet Vocational Technical School, TAD Technical Institute, and the Boy State School of Appliances. In November, Women in the Building Trades presented the three workshops (Sexual Harassment, Assertiveness, and Health and Safety Issues) to the five participants at the Boy State School of Appliances. The workshops were held at Assabet Valley on December 5 and 7, 1995. The counselors and instructors at Assabet audited these workshops. The workshops at TAD Technical Institute were scheduled on January 12, 1996. Unfortunately, the TAD Technical Institute canceled this workshop because of inclement weather. It was rescheduled in February. In the March report, the SDA reported that seven women completed the workshops at TAD Technical Institute. A total of seventeen participants benefited from the WIBT sponsored workshops.

Supportive Training Services

To prepare participants for returning to school, the Metro South/West SDA provided as part of its assessment process an activity on school exploration, requiring the completion of a training worksheet in *The Training Proposal*. [The Metro South/West ETA Workforce Development Career Center offered "Adults Returning to the Classroom, Preparing for Training" to all participants.] The hands-on experiences and tangible results within the skill training were viewed by the case manager as critical to retaining participants.

The support of the instructors was also important to retention. In July 1996, the Metro South/West SDA participants identified the training instructors as the color "blue" which they described as "mainstream, ordinary, stately and organized, soft, gentle, sees something good in everything." Additional adjectives used to describe the instructors were "supportive, easy-going, knowing, helpful, knowledgeable, intellectual, talented, experienced". On-site work experience were limited to three women training at Assabet.

Women in the Building Trades developed training for program instructors providing training to the participants in nontraditional programs.

Community Supportive Services and Referrals

Welfare recipients (dual enrollees) were provided with meal allowances, transportation expenses and needed tools and supplies through the Department of Transitional Assistance.

The Metro South/West Career Center's Resource Library provided directories of supportive services, such as the *Human Services Yellow Pages*, published by George T. Holl, and the SDA developed **Support Services Contact Information**, a listing of local agencies and associations providing counseling, support groups, emergency and general assistance, health care, financial aid, housing assistance, utilities assistance, legal services, food assistance, clothing, tuition assistance, and small business start-up assistance.

Client Tracking Systems

Case management was provided by the case manager who maintained folders on each participant containing enrollment dates, the school attended, the type of training pursued, anticipated completion date and follow-up visit reports.

Women in Plastics, North Central Service Delivery Area

Screening

In the North Central Service Delivery Area, the screening of applicants for enrollment included income eligibility screening criteria:

- either unemployed (no wage income, on public assistance or receiving unemployment compensation) or low to moderate income, including both JTPA and non-JTPA eligible
- either unemployed seeking a position, employed part-time or employed full-time in low skill, low pay occupations in the plastics industry. In the grant technical proposal, the North Central SDA expressed its intention to recruit women aged 22 and older. The Executive Director of the Regional Employment Board sought motivated women with at least a tenth grade reading level, the ability to perform basic algebra, age 22 and older, and able to commute. Each recruit was interviewed by the REB Executive Director. Recruits discussed their work history, prior classroom or on-the-job training, current employment and education goals, and motivation. One woman who was unable to arrange day care was not accepted.

A classified advertisement in the *Worcester Sunday Telegram* (August 27, 1995) stipulated "women age 22 and older who are interested in entering or advancing in plastics careers". An article in the *Fitchburg Sentinel* (June 19, 1995) stated that "The program will include a mentor component, pairing students with a woman already employed in the plastics industry." An additional article by a career columnist in the *Boston Globe* (May 9, 1995) quoted the REB Executive Director: "The Leominster program has no income or residence requirements.... Applicants need at least 10th grade reading level and ability to handle basic algebra".

Assessment

The North Central SDA planned an assessment conducted by a collaborative committee consisting of

members of the Leominster Technical School, the service delivery area, and the private-sector Plastics Council. It was postulated that participants would undergo testing in academic skills to gauge their level of the skills needed to enter the program. If educational remediation was needed, the participants would be provided with training in basic math, algebra, and geometry at the Leominster Technical School.

A formal interview was conducted by the REB Director. Participants discussed training and employment goals as well as interest areas. Previous education, employment and experience were reviewed. The participants were primarily self-selected. Interest or aptitude testing and academic testing (example: TABE) were not provided by the training sponsor. The REB Executive Director attempted unsuccessfully to solicit funds to contract SAGE testing. Ninety percent of the participants had completed high school. In the Third Phase, assessment was conducted by the institutions offering the training as part of the admission process. At Mount Wachusett Community College, the skills of incoming students were assessed in the areas of reading, writing, and mathematics to determine appropriate course placement. For matriculated students at Assumption College, Scholastic Aptitude Test and Achievement Test scores were required.

Counseling and Supportive Services

The Women in Plastics Careers program was designed as an industry-based group training experience and did not provide formal individual counseling. However, informal individual sessions were conducted by the REB Executive Director and the BSSC Coordinator. In the September report, the REB Director reported that "Individual counseling will be provided by Bay State Skills. Appointments have been scheduled to begin developing an individual plan for each participant." Each woman enrolled in the program received guidance from the BSSC Coordinator in developing a plan for becoming employed.

After approximately nine months of training, the Program Advisory Committee was to set up mentoring,

job shadowing, and other work-site experiences for the participants at member companies of the Plastics Council. In May, 1995 the REB Executive Director wrote a letter to plastics industry employers soliciting mentors for women in the plastics career program. In her request, she outlined her requirements.

- Meet with fellow mentors late in the summer.
- Meet with the class to give a brief overview of their jobs in plastics.
- Meet and pair with a student of similar abilities, interests, and goals.
- Be available for phone support of the student partner.
- Attend a follow-up meeting with the student partner.
- At employer's discretion, have the partner visit the mentor's company for a period of time to "shadow" the mentor on the job.

By mid-July, the REB Executive Director reported: "As a result [of the marketing letter on ... the mentoring component], a representative of one prominent firm, NYPRO in Clinton, has recruited seven women who want to be mentors. One is the head of safety for this large, multinational firm, and another is a master mold maker. Another promising connection is with a plastics firm in New Hampshire, where the general manager is a woman who wants to be part of the mentoring program. Altogether we now have 27 women who have expressed [an] interest in mentoring." In her September 1995 report, the Executive Director stated "Approximately twenty women have expressed interest in being mentors. Bay State Skills is making preparations for the mentor training. A training orientation is scheduled for October 25". The REB Director stated to the Bay State Skills Corporation on September 29, 1995 that "Women who are already working at jobs they really like in the industry will be serving as mentors. They will receive training in the Principles and Practices of Mentoring from the Bay State Skills Corporation specialists." By the end of 1995, the BSSC had completed mentor identification and begun recruitment. The BSSC Coordinator reported that she had designed

the mentor training curriculum and contacted each of the thirty prospective mentors.

In March 1996, the REB Director reflected that "Recruiting mentors turned out to be much more difficult than we anticipated. Initial interest as determined by the survey was very high among women in the plastics industry, but actually finding women who could give up significant time to attend mentor training sessions and meet with the program participants was challenging because like most successful women in 1996 these women are extraordinarily busy. However, the [BSSC coordinators] modified the mentoring plan from one-on-one to one-on-three."

In March, the Women in Plastics participants met with the recruited mentors and participated in a training exercise designed by BSSC to introduce mentoring concepts and methods. The mentors were trained in mentoring and group facilitation through instruction and group exercises. A mentor-protégé reception was held at which all attendees completed collages to introduce themselves and received a journal to record their experiences. The BSSC Coordinator reported: "[We] trained eight mentors for the women in plastics and held orientation for protégés. Held reception for mentors and protégés to meet to get to know each other". She observed "We were unable to recruit enough mentors for one-to-one relationship with the Women in Plastics. So after consulting the eight recruited mentors, we changed to mentor groups in which the mentor has three or four protégés. One mentor did drop out [of the mentoring program] it seems because of the change".

In July, 1996, the BSSC Coordinator commented "Finding mentors is always a difficult proposition, particularly when the project is not tied to a specific employer (employers can offer on-site mentors recognition and status for participation in internal projects). For nontraditional occupations the difficulty is enormous. By definition, 25% or fewer employees in a selected field are women. Through our contacts (we've spoken with about 125 women in non-traditional jobs so far), it appears that the majority

of women in these non-trad fields are in the 20 to 40 age range. They often express an interest in future involvement with our project but for a variety of reasons are unable to make a commitment at this time. Reasons run a typical work/family range: pregnancy, young children at home, single parenting responsibilities, caring for an aging parent. Another common reason is that they are involved in a further education program that takes up much of their otherwise spare time. We've also found that there are some misconceptions out there about what a mentor is. Apparently there have been numerous or well-publicized projects in which mentors were expected to find their protégé a job. Others in which mentors were expected to act as therapists. At any rate there is a general reluctance to become involved with mentoring as it is perceived. We've been working hard to change the perception. One further point, many potential mentors — those we've found via networking, have asked if there were some remuneration for their participation. They've pointed out that there are some expenses involved. They do not live right next door to the protégés so they will have to travel, for example. In all but one case, my negative response sent them packing. The project Advisory Board did decide to open up recruitment to include men in these occupations. The few men that responded, though, seemed apprehensive working with women. They also didn't feel that they could address the issues facing women entering the field."

At the statewide Job Training Partnership Act and Employment Service conference in February, 1996, the BSSC Coordinator noted there were misconceptions concerning the activities of mentors. She cautioned that mentors were NOT responsible for:

- placing the protégé in a job,
- providing a job reference for the protégé,
- providing skill instruction, and
- counseling the protégé on personal issues.

A mentor was described as an empathic individual who:

- provides current information on the workplace based on first hand knowledge,

- helps the protégé to refine career goals and strategies,
- supports the protégé's aspirations,
- coaches the protégé to clarify career problems and to find answers to career questions, and
- provides feedback, both positive and negative, that will aid the protégé's career progress.

In September, the BSSC Coordinator further reflected on the mentoring program: "We knew which industry [plastics] to target for recruitment of mentors and had the help of the program's advisory board to do this. We knew the protégés reasonably well and could pair them with mentors that suited their interests and personalities. The participants were well prepared to be involved in the mentoring component and looked forward to it. And a facility was always available to us to hold meetings with either mentors or protégés or both."

The Center for Women, Work, and Family of the BSSC completed the *Handbook on Mentoring Programs* with chapters on Managing Your Mentoring Program, Recruiting, Inviting Mentors on Board, Making Lemonade, Matching, and the Core of Mentors.

In an article by a career specialist in the *Boston Globe* (October 1, 1996), Janice Pollock, mentor and Human Resources Manager at TRW Fasteners (a major manufacturer of precision steel injection molds for the plastics industry) was quoted: "[The participant] and I have a nice, easy-going relationship. She really wants to do an excellent job. After a month or so, she became less nervous, learned to take intricate, expensive molds apart." Amy Ullman, a mentor from Win-Tech International (a manufacturer of packaging materials for the plastics industry), in June stated "The girls that are involved in [mentoring] are really motivated and they're excited about being a part of it and helping these other people up." Janice Pollock commented "We went into the classes. Actually I spoke one night and talked a little bit about careers in manufacturing for women, what a job description for some of those jobs would entail, and then the salary

range and what they could expect out there and also what the difficulties might be." The protege commented "Without her, I wouldn't be here ... really I wouldn't. She's been a great help. She's helped me through my difficulties. It's great."

Seven mentors were recruited by BSSC, resulting in a ratio of one mentor to four participants. Three women: Janice Pallock, TRW, Amy Ullman, Win-Tech, and Paula Danato, Palaroid, provided active mentoring and agreed to participate either in the video, *High Wage, High Skill, High Achievement* or in the statewide conference on nontraditional occupations, *Higher Skills, Higher Wages, Higher Achievement*, held at Holy Cross College, Worcester on October 8, 1996.

Educational remediation was provided to one enrollee through referral to an algebra course.

Role models were actively introduced. The overview of the plastics industry was provided by three women employed by TRW Company Fasteners Division. The session on Quality Control was presented by three women: two employed by TRW and one by TFX, Inc. Six women made a presentation on occupations in the plastics industry focusing on sales/office/computer/warehousing/inventory. Two were employed at Computemps, one at Res-Tech Corporation (a producer of custom precision injection molding), one at Quality Resins (a manufacturer of plastics products), and two at TRW. The lecturers at the Plastics Museum and another at Plastics (a manufacturer of plastic pails, drums, recycling bins, milk crates and coolers) were women. The instructor for Introductory Computers at the Leominster Center for Technical Education was female.

Women role models in the plastics industry played an important part in planning and publicizing the project. Two were referred to in the *Boston Globe* report (May 9, 1995) on the project. Alison Von Eidersteine (Quality Control Manager, Tech Prototype Plastic Parts) provided insight into the quality control environment. "The work is repetitive, something women do better

than men, involves lots of interaction with customers, irate at times, and with people on the floor, helping them restructure what they do. It's rewarding and important to give people information they need to get the job done right." In the same article, Joan Solheim, General Manager of Santin Engineering (a plastics product development company) stated "women's good organizational skills are very useful in plastics processing, where you must think on four or five planes at once."

The mentors and role models had an indirect impact on the job search of the participants. One participant found employment at NYPRO as a machine operator and another was promoted at Res-Tech to a division supervisor. Two participants with direct intervention of the role models gained employment at TRW; one as a mold polishing mechanic and the other as a sorter.

Support Workshops

Seventeen hours of group support workshops were presented to the thirty-one women enrolled in the Women in Plastics program. By the end of June, 1995 the ISP Coordinator had completed a review of the curriculum and resources for the workshop, "Chasing a Living Wage". Adaptations to several sections began. Proposed outlines for the NTO workshops were developed and distributed for review. The proposed topics of the six session "Expanded Horizons" curriculum included Team Building, Cultural Barriers, Self-Esteem, Industry Trends and Future Opportunities, Reducing Math and Science Anxiety, Sexual Harassment, Communication Strategies, and Building and Maintaining Support Systems. The authors were concerned about the effectiveness of delivering the program to groups of less than five women.

The group support workshops were integrated within the industry Career Path component scheduled on Tuesdays and Thursdays from 4:00 to 6:30 P.M. and were to be conducted by the ISP and BSSC.

Two workshops were offered in September, 1995. Women in the Workplace (Who We Are and Why We're Here) was offered on September 26 and Team

Building on September 28, 1995. The twenty-six attendees in the Women in the Workplace workshop participated in activities including an examination of Dick and Jane Readers for the titles of occupations held by adult males and females, a true and false quiz on facts about workers in the United States, brainstorming of verbs representing personal qualities and transferable skills, and a review of eight great reasons to work in nontraditional occupations. In the Team Building session, the twenty-six attendees practiced team communication and analyzed a bad team exercise. The Women in the Workplace and Team Building workshops were very well received. In the September report, the ISP commented favorably on the "high degree of collaboration with the North Central R.E.B. Organizational and coordination efforts between the REB Coordinator and Leominster Vocational Technical School allowed for smooth integration of ISP workshops into training curriculum".

Twenty-seven women attended the Cultural Barriers in the Workplace session (October 10) which included an "I am" exercise and a review of the 1964 Civil Rights Act. The Self-Esteem workshop (October 17) addressed assertiveness and included an exercise in which the twenty-seven attendees identified personal role models. The workshop on Industry Trends and Opportunities was held October 24. The twenty-six participants were taught about labor market information and career information resources. At the Communication Strategies for the Workplace workshop on November 1, the twenty-six attendees learned about verbal and nonverbal communication techniques. By the end of November, the Industrial Services Program had presented six workshops: Women in the Workplace, Team Building, Cultural Barriers, Self-Esteem, Industry Trends and Opportunities, and Communication Strategies for the Workplace. Reducing Math and Science Anxiety and Building and Maintaining Support systems were not presented.

A Career Development workshop was presented on November 14th and November 21 by the BSSC. Participants developed individual employability plans.

For individuals not taking academic courses, monthly follow-up meetings were held at the Leominster Technical Center on Thursday evenings from 4:00 to 6:30 P.M. from February to June. These sessions included guest speakers and presentations on resume preparation, job development, and performance appraisals. The women met during this period to share experiences and to learn from various specialists.

Supportive Training Services

An orientation to the skill training was provided on September 19th and 20th by industry representatives from NYPRO, Mark Technical Mold, TRW, and Star-Cast (a manufacturer of steel injection and blow molds). Field trips were conducted to the Plastics Museum (October 12, 1995) and to Plastics (November 16). The hands-on experiences, tangible results, and supportive instructors were essential to the high retention rate. In a February 1996 focus group (utilizing the forced relationships of Thomas L. Greenbaum, a leader in focus group research) when the North Central participants were asked to name the color they associated with the training institution staff, they selected "red" and "pink". The woman described "red" as "cheery, warm, vibrant, alive, full of life, strong, energetic, bright, colorful, outgoing, very bubbly" and "pink" described as "feminine, soft, open to women, nice, fun, uplifting, encouraging".

In June, two instructors at Leominster Center for Technical Education explained the value of hands-on experience. Steve McNamara, the machine shop instructor, commented "You could see the excitement. The project they made was a hammer. They could not believe that they actually made it from a raw piece of stock to a finished product. They were so happy when they left here. ... to see them excited about something that they did that they couldn't believe they would do". He continued "A lot of them showed that they wanted to learn by staying after 7-8 o'clock at night to finish up projects. They can succeed". Ray Vallee, the computer assisted design instructor, noted "Their second night they were able to do their first

drawing and they applauded their first drawing. So they had an actual part that they had visually done".

The critical interplay gained in the field experience was expressed by one participant (receiving training in mold polishing at TRW Fasteners) and her on-the-job supervisor. The participant stated "Hank, he's my trainer, but I refer to him as my commander-in-chief, because he is a serious man about his job. And, he has a humorous side to him when the work is over. And that's good for me. But when we work he teaches me a whole lot of things." Hank Serafini, her supervisor, added "I knew she could do the work. I wanted to see her succeed. I felt my time wasn't being wasted. I knew she would succeed in this".

By mid-December, the participants were encouraged to research the scheduled courses at schools and colleges which they would like to take the following semesters.

Community Services and Referrals

The Department of Transitional Assistance (public welfare) provided transportation and day care allowances to eligible participants. An SDA staff member, outstationed at the Department of Transitional Assistance, provided coordination.

The participants established their own support systems including babysitting referrals and carpooling.

Client Tracking Systems

Case management and monitoring were provided by the REB Director and an assigned staff member using case folders. The initial application and information about enrollment dates, the school selected, the type of training pursued, estimated completion dates, tuition payment records and follow-up reports were maintained in the folders. A client tracking system included the REB-designed **Positive Outcome Report** and the **Course and Placement Followup Letter**.

RECOMMENDATIONS

1. Be honest in the recruitment process. Deliver what you promise.
2. Screen applicants for interest (tested or expressed), aptitude (tested or demonstrated), and appropriate language and mathematical development.
3. Before the start of the program, require labor market research so that participants have realistic expectations and a clear vision of career paths.
4. Provide group social and emotional support activities, particularly self-awareness, self-esteem building, and assertiveness.
5. Provide a case manager/counselor/liaison.
6. Provide orientation and technical assistance on gender equity and sexual harassment prevention to instructors.
7. Provide training to instructors of adult learners on interactive and hands-on education. Encourage instructors to invite learners to share their experiences and views.
8. Offer orientation and technical assistance on gender equity and sexual harassment prevention to direct supervisors at companies.
9. Provide exposure to women role models who have succeeded in nontraditional occupations by using them as industry instructors and guest speakers.
10. Provide training to potential mentors.
11. Create a social milieu (restaurant, reception at women's organization or club, coffee klatches) for mentor-protege orientation.
12. Provide active mentoring.
13. Create a directory of profiles of women working in nontraditional occupations. Include name, job title, employer, telephone, comments/advice and availability for career activities.
14. Integrate hands-on training, demonstrations and internships as part of the training curriculum.
15. Provide a transition to training through adult education orientation or advance orientation to an academic institution.
16. Provide a transition to job placement through labor market research and a job search session. Provide current information on career pathways and the wages of experienced workers for the selected

nontraditional occupation for which training is provided.

17. Provide monthly follow-up meetings for the unplaced.

18. Communicate frequently with training institution instructors on participant's progress.

19. In advance of the start of the training, identify needed support services such as transportation, child care/elder care, health care and basic support stipends. Collaborate with public assistance and unemployment insurance providers.

20. In advance of the start of training, develop a list of supportive services such as child care and public transportation providers.

21. Conduct face-to-face follow-up visits at training and employment sites.

22. Became familiar with agencies and organizations offering support services. Develop a referral network.

23. Provide women a written referral and directions to relevant agency to enable them to access support services.

24. Identify assessment instruments appropriate for the customers information needs.

The Participants' Perspectives

The Workshop Evaluation Form

One hundred percent of the individuals who participated in the North Central SDA workshops returned their Workshop Evaluation Forms by April 1996. The workshops were rated on a Workshop Evaluation Form prepared by the Industrial Services Program, the deliverer of the workshop. The participants responded by rating statements on a five point scale: High, Somewhat High, Average, Somewhat Low, Low.

Seven workshops were conducted by the Industrial Services Program for the thirty participants of the North Central Service Delivery Area between September 1995 and April 1996. The average number of attenders at each session was 26.3 individuals, a participation rate of eighty-seven percent. The workshops were titled "Women in the Workplace", "Team Building", "Cultural Barriers", "Self Esteem", "Labor Market Research", "Communication Strategies for the Work Place", and "Communication Skills Review".

The mean rating of the overall effectiveness of the workshop content was 4.8. On the five point scale, the mean rating of the effectiveness of the instructor was 4.9. Gain in knowledge or skill received a rating of 4.6. The mean evaluation of the usefulness of materials was rated 4.7.

The effectiveness of group feedback and interaction is reflected in the following participants' statements:

"Knowing all these women are thinking the same as I do",

"People pointing out your better points",

"Taught me to listen and work with other people, and ... get along".

The participants commented on their increased self-esteem:

"Starting to build self-esteem",

"Made me go home feeling good",

"As always I leave [these sessions] with more sense of worth",

"Being proud to be a woman",

"I feel more confident about myself",

"I feel more confident about myself going out and finding what will make me happy", and

"I will be a problem solver".

Participants noted increased self awareness:

"Made me understand more about myself and my goal",

"Learned the things stopping me ...",

"[Learned] how to get what you want and not sound like a bully", and

"I will think more of my body language when I am angry".

In summary, the participants in the workshops reported increased satisfaction with group feedback, increased self esteem, and increased self awareness.

Participants commented favorably on the process:

"[Keeping] the journal is a great idea", "The bad team experience exercise [was valuable]", "The 'I am ...' exercise" [was useful], "Listing women we admire and why was good", "demonstration of low esteem - and then showing a marked physical change with self esteem [was helpful]", "Looking at the newspapers, evaluating more than just the want ads", "How to read a newspaper to get more out of it", and "the 5 keys of mastering change".

The instructor of the workshops was an active role model who fulfilled an unofficial mentoring role. In conversation and in written comments, the participants expressed admiration for her style and empathy. They were inspired by her enthusiasm and positive attitude. Comments included:

"Very effective style, keeps your interest".

"A style all her own".

"Would be happy to attend any session she presents".

"Great to listen to, easy to learn from".

"A pleasure".

"Very interesting".

"Serious/with a good sense of humor".

"Very up and enthusiastic person".

"She moves people's minds, everybody participates with her direction".

"She came through to me".

"She really makes you want to participate in the class".

"Perfect attitude - attitude is everything".

"She has really made me take a look at the future in a positive way".

"I like her. She's a great teacher".

Workshop Evaluation

Workshop Title _____ Date _____

Workshop Leader(s) _____ Location _____

Please rate each of the following on a scale from 1 to 5. Your input is important for us to make your workshops as beneficial and enjoyable as we can.

	HIGH		AVERAGE		LOW
1. Overall effectiveness of content	5	4	3	2	1
Comments:	_____				

	HIGH		AVERAGE		LOW
2. Effectiveness of instructor	5	4	3	2	1
Comments:	_____				

	HIGH		AVERAGE		LOW
3. Your gain in knowledge or skill	5	4	3	2	1
Comments:	_____				

	HIGH		AVERAGE		LOW
4. Usefulness of materials	5	4	3	2	1
Comments:	_____				

5. What was the most important/useful part of the workshop?

6. What was the least important/useful part of the workshop?

7. What was not included that would have been useful?

8. What additional workshops/topics would interest you?

The Massachusetts Response Form

Over one-fourth of the individuals enrolled in the Metro South/West Service Delivery Area and one-third of the individuals enrolled in the North Central SDA returned their *Response Forms* by June 1996.

The participants responded by rating statements on a five point scale: Very Dissatisfied, Somewhat Dissatisfied, Neither Satisfied Nor Dissatisfied, Somewhat Satisfied, Very Satisfied.

Seventy percent of the respondents in the Metro South/West SDA training program were very satisfied with the first phase of the training program, with the remainder expressing high satisfaction. All would recommend the training program to a friend. Every respondent was very satisfied with the opportunity for class participation. Eighty-five percent of the respondents rated the courtesy, knowledge and responsiveness of the training staff as very satisfactory. The clarity of the orientation and the supportive services were evaluated as very satisfactory by eighty-five percent of the respondents. Seventy percent of the respondents described the trainers, the appearance and cleanliness of the training facility and the training materials as very satisfactory.

All respondents from the North Central SDA training program were somewhat satisfied with the program, with ten percent indicating they were very satisfied with the first phase of the program. The remainder expressed high satisfaction. Three-quarters of the respondents would definitely recommend the training program to a friend. The remainder would probably recommend the training program to a friend.

Eighty percent of the respondents in the North Central SDA rated the appearance and cleanliness of the training facility and the opportunity for class participation as very satisfactory. The courtesy of the training staff was found to be very satisfactory by seventy percent of the respondents. Fifty percent of the respondents rated the knowledge and the responsiveness of the training staff as very satisfactory. The remaining participants evaluated these components as somewhat satisfactory. Both trainers and training materials were rated as somewhat satisfactory. Twenty percent of the respondents rated orientation and supportive services as very satisfactory.

The participants' expectations and the design of the training programs are reflected in the completed self-evaluations of the first phase of training.

All Metro South/West SDA participants who responded to the *Reaction Form* expected to receive job specific training. Comments of the Metro South/West SDA participants on the *Response Form* noted that the "lecture and shop (were) most valuable to me", "the portion of the training most valuable to me was self-esteem", "the most valuable training (was) hands on theory", and "the shop-time, hands-on training is very important to me". Comments on supportive services included "the counselor/financial help was most useful to me" and "Everyone was helpful".

The Metro South/West Service Delivery Area training program emphasized individual referrals to specific occupational training shortly after enrollment in the program. Small group supportive workshops were offered at the training institution sites. A case manager was assigned specifically to the program and followed each participant individually.

Seventy-five percent of the North Central SDA participants who responded to the *Reaction Form* in October, 1995 expected to receive job specific training.

Sixty percent of the North Central SDA respondents answered "no" to Question 1 on the *Response Form*: "Has the training provided you with the knowledge and skills to do the key job functions in the occupation which you selected?". Two women (twenty percent of the respondents) added "not yet -don't know yet" and "I haven't selected yet". Among the recommendations for change were "get into individual courses sooner" and "put training (CAD, machine shop, and computers) first to expose us to those fields".

The North Central Service Delivery Area training program was designed as a group exposure to the plastics industry through a series of speakers and rotation through mold polishing, machine shop, and computer

assisted design between September and December, 1995. Group supportive services were provided in the evenings at a central location by the Industrial Services Program coordinator.

In summary, seventy percent of the respondents in the Metro South/West SDA and ten percent of the North Central SDA respondents were very satisfied with the first phase of the training.

COMMENTS BY PARTICIPANTS, NORTH CENTRAL SDA

The program changed my life 100%. God bless the REB Director.

- The speakers not directly related to the plastics field were least valuable to me.

- The self esteem workshops were most valuable to me.

- The mentor as nice as she was, she was no help.

- General training, team building, self-esteem ; which can be used at any job (most valuable)

- The mentoring, I never heard from her [least valuable].

COMMENTS BY PARTICIPANTS, METRO SOUTH/WEST SDA

Should be more accountability for all students attendance and grades.

- The counselor/financial help was most useful to me.

- The portion of the training most valuable to me was self-esteem.

- Everyone was helpful.

- One recommended change: Create a mandatory orientation/workshop in addition to the ones that already exist for the men dominated facilities to give them awareness to have respect for the opposite sex. Example: How disgusting a female student might think it is to step in their spot on the floor; hear their disgusting comments on how they think a certain noise is the same as a sexual act and their swearing or where they would hang a "stick up" on a woman, specifically male students NOT the instructors.

- One recommended change to improve this training: the idea that the male students know that JTPA gives the women of the program money.

Response Form

LOCATION: _____ LAST 4 DIGITS OF SOCIAL SECURITY NUMBER: _____

Please complete and give to the counselor/facilitator.

Question One: During the first phase of this training program, how satisfied were you with the following: (Indicate all that apply) Do you *agree* or *disagree* with the following statements?

Directions: Read each item carefully. Please circle the response which most closely corresponds to your point of view.

1 = Very Satisfied

2 = Somewhat Satisfied

3 = Neither Satisfied Nor Dissatisfied

4 = Somewhat Dissatisfied

5 = Very Dissatisfied

1. Staff courtesy	VERY SATISFIED	1	2	3	4	5	VERY DISSATISFIED
2. Staff knowledge	VERY SATISFIED	1	2	3	4	5	VERY DISSATISFIED
3. Staff responsiveness	VERY SATISFIED	1	2	3	4	5	VERY DISSATISFIED
4. Clarity of orientation session	VERY SATISFIED	1	2	3	4	5	VERY DISSATISFIED
5. Appearance and cleanliness of the training facility	VERY SATISFIED	1	2	3	4	5	VERY DISSATISFIED
6. The trainers	VERY SATISFIED	1	2	3	4	5	VERY DISSATISFIED
7. The training materials	VERY SATISFIED	1	2	3	4	5	VERY DISSATISFIED
8. Opportunity for class participation	VERY SATISFIED	1	2	3	4	5	VERY DISSATISFIED
9. Opportunity for hands-on experience	VERY SATISFIED	1	2	3	4	5	VERY DISSATISFIED
10. Support services such as counseling.	VERY SATISFIED	1	2	3	4	5	VERY DISSATISFIED

Question Three: Would you recommend THIS training program to a friend?

Directions: Read each definition. Please circle the response which most closely corresponds to your point of view.

1 = Definitely Not

2 = Probably Not

3 = Might or Might Not

4 = Probably

5 = Definitely

DEFINITELY NOT

1

2

3

4

5

DEFINITELY

Question Four: In order to continue to improve training opportunities for women, we need your ideas, comments, and suggestions. Please respond to the following open-ended questions.

1. Has the training provided you with the knowledge and skills to do the key job functions in the occupation which you selected?

YES _____ NO _____

If No, what else do you need to learn? _____

2. What portion of the training program was the most valuable to you? _____

3. What portion of the training program was the least valuable to you? _____

4. How useful were the training materials? _____

5. If you could make one change to improve this training, what would you change? _____

The Massachusetts Training Evaluation Form

Over one-third of the individuals enrolled in the North Central SDA had returned their *Training Evaluation Forms* by July 3, 1996. The participants responded by rating statements on a five point scale: Strongly Agree, Somewhat Agree, Neither Agree Nor Disagree, Somewhat Disagree, Strongly Disagree.

The response of the participants to the mentoring provided by the program was temperate.

- Seventy percent felt that the mentors had provided them with strong encouragement and support.
- Fifty percent of the respondents agreed that the mentors had provided them with information about formal work rules in the occupation/industry. .
- Fifty percent of the respondents indicated that the mentors had explained the informal rules and expectations of the occupation/industry.
- Fifty percent agreed that their mentors/trainers had reviewed their resumes.
- One respondent commented that it was her fault because she could not attend most of the meetings the mentor set up.
- Forty percent of the respondents agreed that the mentoring program introduced them to individuals who worked in their chosen field.

Question Two: Do you agree or disagree with the following statements? Please circle the response which most closely corresponds to your point of view.

Directions: Read each item carefully. Using the scale shown below, circle the number which best describes your belief.

- 1 = Totally Disagree
- 2 = Mostly Disagree
- 3 = Disagree somewhat
- 4 = Agree somewhat
- 5 = Mostly Agree
- 6 = Totally Agree

1. My mentor/trainers introduced me to people who work in my chosen field.	DISAGREE	1	2	3	4	5	AGREE
2. My mentor/trainers provided me information about formal work rules in this occupation/industry.	DISAGREE	1	2	3	4	5	AGREE
3. My mentor/trainers explained the informal rules and expectations of this occupation/industry.	DISAGREE	1	2	3	4	5	AGREE
4. My mentor/trainers provided me encouragement and support.	DISAGREE	1	2	3	4	5	AGREE
5. My mentor/trainers/instructors reviewed my resume.	DISAGREE	1	2	3	4	5	AGREE



Training

Training

The critical design element of the two Massachusetts training programs for nontraditional occupations for women was the training delivery model. The training design effected the recruitment efforts and the delivery of supportive services. Each program provided training differently. The Metro South/West program provided individual referrals for occupational instruction to diverse training institutions. The North Central program designed a group training program focused on a specific industry.

The Crafts, Repair and Technologies Program in South Suburban Boston

Customized, individualized referrals to institutions offering training for nontraditional occupations were offered by the Metro South/West Service Delivery Area. The program was designed to focus on specific nontraditional occupations in the automotive, electrical, construction, biotechnical, small appliance repair, and electronic, environmental laboratory, health, and optometric/ophthalmic technologies fields. The training design provided for contracting with existing vocational schools, community colleges, and union apprenticeship programs. The recruitment flier advertised "training in careers such as automotive technology, electrical apprenticeship, construction apprenticeship, carpentry, job & electronic technologies, small appliance repair, and heating, ventilation, air-conditioning".

In the technical proposal, the Service Delivery Area proposed enrollment in:

- 1,000 to 2,000 hour training programs in automotive technology
- 600 to 1,000 hour training programs in wiring and equipment installation
- 800 to 1,000 hour training programs in carpentry, plumbing, skilled maintenance, heating ventilation, and machine operation
- 600 to 1,000 hour training programs in biotechnology, environmental technology or health technology

- 800 to 1,000 hour training programs in small household appliance repair, including related heating, refrigeration, and electrical repair
- 1,000 to 1,500 hour training programs in optical/optometric/ophthalmic manufacturing, service, and repair

The enrollment schedule was incremental for the Metro South/West area program because of the staggered individual referrals to specific nontraditional occupational training. R.E.T.S. (Radio, Electronics and Television School) Electronics School offered open enrollment with classes starting each Monday. Other proprietary institutions offered monthly openings. The majority of post-secondary schools had semester-based scheduling, with most courses beginning in September or January. The program enrollment period was from September, 1995 through September, 1996. Ten individuals enrolled in September and five in October of 1995. These fifteen participants attended training programs at three institutions: Assabet Valley Regional Vocational Technical School, Boy State School of Appliances, and TAD Technical Institute. Four individuals enrolled in November, attending programs at Boy State School of Appliances, Clark University, ITT (International Telephone & Telegraph) Technical Institute, and TAD Technical Institute. The total number of participants reached nineteen by November. The next wave of enrollments began in the winter of 1996 with the admittance of two women in January. Four enrollments in February, increased the number of participants to twenty-three. These women attended Quincy College, RETS Electronic School, Clark University, and New England Troctor Trailer School. Twenty-seven recruits were enrolled in training by the end of April. In September 1996, the twenty-eighth participant entered Clark University.

A modified voucher approach was used to finance the academic training of the individually referred participants. The Metro South/West Workforce Development Career Center created a looseleaf binder containing listings of training programs of less than one

year duration and occupationally oriented academic courses fulfilling certification requirements. Based on interests, aptitudes and experience, the participant selected an occupation for training and the provider of training. The case manager/counselor reviewed the individual services strategy plan with each participant. After screening the employability plans for appropriateness, the counselor referred the woman to an appropriate training institution to begin the admissions process. Upon the participant's acceptance, the service delivery area paid the tuition directly to the training institution. This process took up to one month from application to the actual start of training.

During the first four months of the program's implementation (September - December, 1995), proprietary and regional vocational technical schools offered to program participants training which started each month. Women were trained in certificate and diploma programs at Assabet Valley, Boy State School of Appliances, ITT Technical Institute and TAD Technical Institute. The women received instruction in crafts and repair occupations including appliance repair, automotive mechanics, carpentry, computer electronics, diesel technology and refrigeration repair. The duration of the selected training ranged from eight to eleven months. In the second half of the program (calendar year 1996), enrollments were at colleges, proprietary schools and regional vocational technical schools. (Although community colleges were an option for training in computer and information sciences and electronics communication technology, the participants did not choose to utilize the community colleges within or adjacent to the service delivery area) Women were trained at Clark University, Keefe Technical School, Minuteman Regional Vocational Technical School, New England Troctor Trailer School, Quincy College, and RETS. These women were instructed in predominantly technical occupations: biological technology, biomedical engineering, certified network engineering, computer and information science, electronics communication technology, environmental science, graphic and printing equipment technology, and truck driving.

Enrollments were in the crafts, repair, technologies and transportation:

Crafts	
Carpentry	1
Repair:	
Electrical/electronic equipment	4
Auto/automotive mechanic	4
Computer/installer/repair	2
Heating/air conditioning	1
Technologies	
Electrical/electronic/communications	3
Graphic & printing equipment	3
Business systems networking	3
Hydraulics technology/technician	2
Biomedical engineering/related	1
Water quality/wastewater treatment	1
Biological technology	1
Transportation	
Truck, bus & other commercial driving	1
Training duration ranged from ten weeks to eleven months.	

The modified voucher approach was used to finance training at the following institutions:

Assabet Valley Regional Vocational Technical School	(4 students)
Bay State School of Appliances	(5 students)
Clark University	(6 students)
ITT Technical Institute	(1 student)
Keefe Technical School	(1 student)
Minuteman Regional Vocational Technical School	(2 students)
New England Tractor Trailer School	(1 student)
Quincy College	(1 student)
RETS Electronics School	(1 student)
TAD Technical Institute	(6 students)

Each school provided to its students an orientation to the training institution and its requirements. Following the completion of school training, one participant enrolled at a carpentry apprenticeship program. This participant also earned her GED.

By the end of January, one participant completed training in electrical/electronics/communications. Two additional completions at Bay State School of

Appliances were reported by the end of February. A participant completed training at Clark University during March. Participants completed training for client server/business systems networking at Clark University and for major appliance repair by the end of April. During May, an additional participant finished her training at Minuteman Technical School.

By late June, 1996, a total of eight participants had completed instruction in electrical/electronic/communications (1), biomedical engineering (1), biological technology/tech (1), carpentry (1), electrical/electronics equipment (2), graphic & printing equipment (1) business systems networking (1). In July, a trainee in automotive technology graduated from TAD Technical Institute. In August, two more participants finished training, with completions recorded at Clark University and Assabet. As of mid-September, twelve women had completed training, with the completion of auto technology training at TAD Technical Institute. In October, participants fulfilled their course requirements at New England Tractor Trailer School and Clark University. By the beginning of December, sixteen women had finished training. The estimated completion of one student at Assabet Valley was extended to December 31, 1996 because of extenuating circumstances. The May report noted that the instructor of refrigeration repair had died, affecting the plans of one student. The June report provided follow-up: "Due to the death of her instructor, she will be going back to school September through November for Refrigeration/Air Conditioning Repair and Certification". The other students completed training programs at RETS, TAD Technical Institute, Bay State School of Appliances, Keefe Technical School, and Clark University in December.

As of mid-March 1997, one participant who had been referred by the Department of Correction dropped out of training due to relocation. Two participants temporarily withdrew from the labor force, one for medical reasons. One woman pursued an associate's degree in electronics technology.

Several participants received academic recognition or awards: the student of the month at TAD Technical

Institute; class speaker at graduation (refrigeration appliance repair) at Assabet; bronze medalist at the VICA (Vocational Industrial Clubs of America) national appliance repair competition; nomination for Adult Vocational Award by the Massachusetts Association of Vocational Administrators; and the student's profile in the school newsletter.

The Women in Plastics Program in North Central Massachusetts

The North Central Massachusetts Regional Employment Board (NCMREB) staff partnered with the local technical school, a community college and the North Central Massachusetts Plastics Council, in the design and implementation of the training program. The initiative for the program came from the private sector. The involvement of small companies was solicited. Two plastics executives: Richard White, Sales and Marketing Director, Mark Technical Mold, Inc. and Mark Lavoie, Purchasing Manager, Mar-Lee Molds Company, instructors at the Leominster Center for Technical Education and faculty at Mount Wachusett Community College, worked with the REB Director in designing the program. The planning group met twice and reviewed the curriculum design in July. Representatives from the plastics council and manufacturers of molds for the plastics industry recommended training in mold making and wire electrical discharge machining. Richard B. White of Mark Technical Mold, Inc., a manufacturer of molds for the plastics industry, wrote a letter of support for the grant. He noted "In mold making positions, in specialized machining of metals (CNC milling, turning, electrical discharge machining) and computer assisted drafting and design, skills are in high demand as well as well paid". He added "If this program is funded, I along with many others in the plastics industry would be willing to visit the classroom to give an overview of the types of jobs in the mold making industry". The commencement of the program was delayed until September 11, as requested by the instructors, to accommodate the

schedules of the machine shop instructor and industry representatives. The Regional Employment Board (REB) Executive Director was concerned about designing a curriculum to be presented by industry representatives who were inexperienced in classroom teaching and educators who were used to teaching structured academic courses.

In a report prepared by the City of Leominster Office of Planning and Development, the *State of the Plastics Industry: An Overview of the Plastics Industry in the Greater Leominster Area* (Morch, 1996), it was noted that "Large and small firms differed somewhat on job training needs. While experienced mold makers and designers were given the highest priority by both, the overall level of knowledge and skills were more important to small firms. Following mold making experience, small firms listed computer knowledge and experienced machinists as their next most important training needs. Only one firm identified ESL [English as a Second Language] as a priority, while none of the firms pointed to the need for basic skills. Conversely, large firms responded with ESL and basic skills as their most important job training needs. The job training needs of the region also differ according to industrial sector. For the primary injection molding companies, the needs most cited in the industry survey were basic education and ESL. Conversely, the needs of the region's tool and die makers involve more specialized training in CAD/CAM and CNC machining".

The twelve month intensive group training program at a local technical school in North Central SDA was designed to provide transferrable skills and occupational competencies required by the plastics industry. The program was planned to address the low participation rate of women employed in the plastics industry. In the March 1996 report: *State of the Plastics Industry: An Overview of the Plastics Industry in the Greater Leominster Area*, the City of Leominster Office of Planning and Development stated "The role of women in the region's plastics industry is comparable to that of any other traditional male industrial sector. Women are typically placed in lower-skilled jobs that

are physically less demanding". The training program was formulated to include a career path component and skills training. The career path component provided a description of skills to be learned, an explanation of possible career paths, and information on the educational requirements needed for career advancement in the plastics industry. Training and learning were envisioned as contextualized and competency-based. Each student would be provided with a lathe which she would learn to operate. A curriculum for the nine month skill training component was designed to include:

- applied mathematics including algebra, geometry, and trigonometry.
- computer-aided drafting.
- computer-aided manufacturing; and
- machine shop training on lathes and milling machines.

Upon completion of the training, the participants would be qualified for positions including mold polishing, machine tool programming, machining, quality assurance, purchasing and sales. The grant proposal postulated that the drafting training would prepare women for positions in other industries as well.

Recruitment fliers and newspaper articles emphasized that the program was designed for women seeking entry-level positions or career advancement in the plastics industry. In the *Fitchburg Sentinel* (June 19, 1996), the Executive Director of the North Central Regional Employment Board characterized the program as a "curriculum aimed at women who want to enter the plastics field or who are already employed in the plastics industry and want to advance". The training program was further described as "classes in module form in order to allow students to pick and choose the areas in which they want to concentrate. Topics to be addressed included quality control, purchasing and sales, introduction to machine technology and mold polishing". An advertisement in the *Warcester Sunday Telegram* (August 27, 1995) highlighted "women age 22 and older who are interested in entering or advancing in plastics careers".

The program was designed to begin September 11, 1995, with the first phase lasting through early November. Training was scheduled in the late afternoon on Tuesday and Thursday from 4:00 P.M. to 6:30 P.M. to accommodate the schedules of women who worked. The curriculum was composed of separate modules so women could attend those sessions which they needed. A women only milieu was created to provide a supportive environment for learning concepts and skills. By mid-October, a comprehensive career path component was developed including an overview of the plastics industry, a presentation on plastics materials and processes by a university professor, exposure to molding machine technology of the Plastics Museum, an explanation of quality control processes by industry specialists, and information on sales/office/computer/warehousing/inventory positions by plastics industry specialists.

An overview of machine technology, metal working, metrology, blueprint reading, and computer assisted design were scheduled to be offered in Phase Two. In early December, this phase of the curriculum was revised to include two seminars on mold polishing. The sessions were organized as three groups of ten women rotating through hands-on workshops on machining, computer assisted design, and computer processing. Each workshop was scheduled to meet five consecutive times between late November and late January.

Phase Three of the skills training program was devised to create opportunities for individual referrals to classroom training at contracted technical schools, community colleges, and colleges. Courses anticipated included injection molding, mold/blueprint reading, computer assisted design, quality control, computer applications, polymeric materials, design applications, purchasing, marketing and sales, management and production, mold polishing, and metal working machining. Program planners recognized that the course scheduling, enrollment space availability, and funding would influence the full implementation of Phase Three which was scheduled to be held from February through June, 1996.

The Plastics Technician program began with thirty-one enrollees in September, 1995. Twenty-two and one half hours of skills training were provided to the trainees in Phase I. On September 11, Dick White of Mork Technical Mold and Terriann Terry of the REB held a comprehensive orientation to the plastics industry, the goals of the program and the training program requirements. A panel of employers representing NYPRO, Mork Technical Mold, TRW, and Stan-Cast presented an overview of the plastics industry on September 19 and September 21. Employers enthusiastically volunteered their time. Through September 28, six employers had made presentations to the class. Plastics Materials and Processes were covered on October 3rd by Nick Schott, Professor at the University of Massachusetts - Lowell. The holding power of the training program was exhibited by three women who had found employment by October 1, 1996, but decided to complete the program. In the September report, the REB Director reported "Three women who were unemployed when the program began have gotten jobs. All [the jobs] are in manufacturing and are technical in nature, although none is actually in plastics. They each told me that they told their potential employer that they would want to continue to attend the course. In each case, this involves leaving work on Tuesdays and Thursdays. Each employer agreed and each new job holder continues to show up for class". She observed "One welfare recipient who is expecting a baby that is ten days overdue keeps on attending saying that she likes the class". The REB Executive Director commented that the sessions had "a sense of authenticity".

A session on Molding Machine Technology was conducted at the Plastics Museum on October 12. Three industry specialists conducted the Quality Control session on October 19. The Sales/Office/Computers/ Warehousing/Inventory occupations session, held on October 26, was conducted by industry experts from Res-Tech, Quality Resins, and Computemps. A woman from TRW presented the Quality Control session on November 2.

In November, 1995, Phase Two offered two sessions on mold polishing (November 14 and November 21) and three seminars with groups of ten women rotating through five hands-on workshops on machining, computer assisted design, and computer processing. The women took an additional sixth session which was selected from among the three workshops based on their employability plan. Each workshop met between November 28, 1995 and January 25, 1996. Each participant received forty hours of instruction. The thirty-one enrollees completed Phase Two of the customized group training sessions for the Plastics Technology/Technicians program at the Leominster Center for Technical Education.

In the first quarter of 1996, most of the women in the plastics program individually selected an academic course related to the segment of the plastics industry in which they intended to pursue employment. Some participants selected two courses. Individualized referrals to training at academic institutions were financed using a modified voucher approach. Selection and costs were reviewed by the Executive Director of the North Central Massachusetts Regional Employment Board (NCMREB). Requests were approved on a case-by-case basis, with particular attention to the employment outlook for the selected occupation, the necessity of the course work for career advancement, and the availability of employer tuition reimbursement. After the participant's selection was approved by the NCMREB staff, the participant was permitted to tell the school or college that the grant would pay the fee, tuition and book costs (in some instances). Upon receipt of invoices, payment was made to the training institution. No payments were made by NCMREB without invoices or receipts. The NCMREB issued quasi-letters of credit informing the schools that the NCMREB would pay the tuition upon receipt of the invoice. In most instances, NCMREB paid the institutions rather than reimbursing the students. The NCMREB considered reimbursing the student if the school would not accept payment upon invoice. In that instance, the participant was instructed to call the REB Director for approval. The participant could not expect automatic approval and reimbursement.

Twenty-one participants enrolled in thirty-seven courses at regional vocational technical schools, community colleges and colleges. The training institutions included Assumption College, Becker College, Ellis Regional Vocational Technical School (CN), Fitchburg State College, Leominster Center for Technical Education, Montachusett Regional Vocational Technical School, Mount Wachusett Community College, New Hampshire Technical College, NYPRO Institute, Quality Institute of New England (through MWCC), Quinebaug Community College (Danielson, CN) and Quinsigamond Community College.

The February start of Phase III reduced the number of courses available for enrollment. In the spring of 1996, nine women enrolled at NYPRO Institute, an accredited academic division of NYPRO, Inc. based in Clinton. Offering certificate and degree programs in precision plastics injection molding and computer assisted design, the Institute has affiliations with five colleges in Central Massachusetts. The students completed courses in Injection Molding (4), Polymeric Materials (2), Statistical Process Control (2), and Computer Aided Design (1). At Mount Wachusett Community College (MWCC), ten participants took twelve courses in the spring and fall 1996 semesters: Computer Applications (4), Intro to Microcomputers (1), Marketing (1); Quality Improvement (4); and the Microsoft Office (1). Business Organization was taken at MWCC by one participant in the fall of 1996. [At the Quality Institute affiliated with Mount Wachusett Community College, four women took courses including Introduction to ISO 9000 (2) in the summer and Total Quality Management (2) in the fall].

One individual finished two courses at Quinebaug Valley Community College in Connecticut (including CAD/CAM) in the spring and fall semesters of 1996. This participant also studied Basic Blueprint Reading at Ellis Regional Vocational Technical School. Four women attended courses at Quinsigamond Community College in the spring and summer semesters, 1996: Computer Applications (2), Introduction to

CAD (1) and Beginning Algebra (1). At Leominster Center for Technical Education, one participant took instruction in Wire Electrical Discharge Machine Training. In the spring of 1996, a participant completed Behavior in Organizations at Assumption College.

A new wave of enrollments began in the fall semester, 1996. Two women enrolled at New Hampshire Technical College. At Fitchburg State College, another woman completed successfully Writing I. Coursework for Introduction to CAD was taken at Montachusett Regional Vocational Technical School. One participant received instruction in two courses at Becker College: Introduction to Computers and Biology.

Most of the courses taken were equivalent to those offered in the associate degree program in Plastics Technology offered by the combined program of NYPRO Institute, Mount Wachuset Community College and Fitchburg State College: English Composition I, Measurement Techniques and Blueprint Reading, Technical Mathematics, Organizational Behavior, Statistical Process Control, Polymeric Materials Design and Application, Injection Molding, and Mold Design. Trainees enrolled in the following courses:

Quality Improvement	5
Injection Molding	4
Computer Aided Design	4
Polymeric Materials	2
Statistical Process Control	2
Introduction to Computers	2
Introduction to ISO 9000	2
Marketing	1
The Microsoft Office	1
Business Organization	1
Basic Blueprint Reading	1
Beginning Algebra	1
Wire Electronic Discharge Machine Training	1
Behavior in Organizations	1
Writing I	1
Biology	1

The REB Director stated in June 1996 "During this quarter most of the women completed the academic

course work that they had individually selected in order to make them more employable in the plastics industry or some other manufacturing or nontraditional occupation. We have not heard from all the participants, but the anecdotal reports that are coming in are quite positive. We have not heard of a mark below a B". She commented "although not everyone has reported in, the reports to date on outcomes for the academic course work that people selected and took related to their own individual plans for career advancement have been exceptionally good".

Formal on-the-job training was provided in mold making of TRW to one participant. Another participant took remedial level training, Beginning Algebra.

In the June 1996 report, the REB Director noted "We arranged for a certificate for the women on July 11. Mentors, advisors and instructors were invited. The ceremony was a big success. [A participant] brought her three daughters who are in high school in Gardner. They are so proud of their mother for getting off welfare and improving life for them all".

All thirty-one women completed Phase One of the Plastic Technicians training as of 12/31/95. As of 01/31/96, four had completed the Women in Plastics program. Eight finished their training by 06/30/96. By 10/23/96, fifteen participants had completed the program. Two participants remained in school full-time. One was enrolled at Mount Wachuset Community College, pursuing an Associate's Degree in Business and Human Services. The other was completing coursework towards an Associate's Degree. Another woman, completing course work for a Bachelor's Degree part-time, reported "[I] took steps to finish education [Assumption College] will graduate May 97".

A number of the participants were recognized or rewarded for academic achievement: A in injection molding at NYPRO; A in Writing I at Fitchburg State College; A in Introduction to Computers at Becker

College; A in ISO 9000 course at the Quality Institute of New England. and A in Beginning Algebra at Quinsigamond Community College. One recipient won a \$500 scholarship at her local community college.

Employers and instructors were enthusiastic about the training. In the June 1996 report, James Updyke of TRW was quoted: "This is just the tip of the iceberg for TRW. I think it gives us the opportunity to train many people such as the [participants] of the world in trades that we have a hard time procuring skilled workers". Roy Vollee, the computer assisted design instructor at the Leominster Center for Technical Education enthusiastically stated: "As a teacher, I feel proud to have taught people who are so committed".

RECOMMENDATIONS

1. Include local employers in the design of curricula for training programs.
2. Encourage local employers to participate on vocational-technical schools and community colleges advisory boards.
3. Use computerized career information delivery systems to provide recruits with information about available training courses.
4. Create a brochure listing training programs of less than one year duration and occupationally oriented academic courses fulfilling certification requirements.
5. Utilize as much as possible open-entry/open exit enrollment in programs instead of set entry and exit dates.
6. Utilize training institutions offering portable credentials such as diplomas, certificates, academic credit or degree.
7. Utilize proprietary training schools (schools run for profit and linked to particular businesses and occupations) for short-term, open-enrollment training.
8. Use vocational technical schools and community colleges which provide quality training at reasonable costs.
9. Work with vocational-technical schools and community colleges to maximize the use of fall, spring and summer semesters.

10. Expect to adapt the training to the normal academic calendar. Budget sufficient training funds if nontraditional schedules, evening hours, or weekend training are planned.

11. Train instructors in cultural and gender issues in order to improve their attitudes about training women for nontraditional employment.

12. Provide orientation and technical assistance on using audiovisual equipment and lesson plans to industry representatives who are inexperienced in classroom teaching.

13. Work with vocational technical schools and community colleges to create increased opportunities for hands-on instruction, on-the-job training, in-house training and internships.

14. Use a "modified voucher" approach to finance individual referrals to proprietary schools, vocational-technical schools, community colleges and college courses.

15. Include internships, practicums and supervised volunteer experiences as part of the training offerings for women with no work history in order to increase their potential entry employment wages.

Project Flow Evaluation

ACTIVITY	METRO SOUTH/WEST SDA	NORTH CENTRAL SDA
Training		
orientation	each individual school did orientation	September 11, 19 and 21
remedial	none provided	one enrollee - Beginning Algebra
group customized training contract	no	Plastics Technology/Technicians - 31 enrollees Phase One - 31 completers Plastic materials and processes 10/03/95 Molding Machine Technology 10/12/95 Quality Control 10/19/95 Sales/Office/Computers/Warehousing/Inventory occupations 10/26/95 Quality Control 11/02/95 Phase Two - 31 completers - Mold polishing seminar 11/14/ and 11/21/95 Workshop rotations (11/28/95 to 01/25/96) Machine shop at LCTE CAD at LCTE Introduction to computers at LCTE
individualized referral	Total enrollment: 11, 10/12/95 Total enrollment: 16, 11/30/95 Total enrollment: 19, 12/05/95 Total enrollment: 21, 01/30/96 Total enrollment: 25, 02/30/96 Total enrollment: 26, 03/30/96 Total enrollment: 27, 06/30/96 Total enrollment: 28, 09/30/96 Assabet Valley 4 2 by 10/12/95 (carpentry, appliance repair) 4 by 12/05/95 (appliance repair) 4 by 01/96 (carpentry) carpentry 1 appliance repair HVAC 1 electronics 2 Bay State School of Appliances 5 4 by 10/12/95 (HVAC) 5 by 11/30/95 (computer electronics) 5 by 12/05/95 appliance repair 4 computer electronics 1 TAD Technical Institute 6 5 by 10/12/95 (automobile mechanics) 6 by 11/30/95 (diesel mechanics) 6 by 12/05/95 6 by 01/96 (Alarm Systems Wiring) 6 as of 02/14/96 M-Th 3:00 PM auto technology 4 diesel technology 1 alarm systems wiring 1	Phase III 21 enrollers in 37 courses Nypro Institute 9 (Spring and Fall 1996) Injection Molding 4 (Spring and Fall, 1996) Polymeric Materials 2 Statistical Process Control 2 Computer Aided Design 1 Mount Wachusett Community College 10 (Spring and Fall 1996) Computer Applications 3 Quality Improvement 3 Intro to Microcomputers, 1 (spring 96) Marketing 1 The Microsoft Office 1 Business Organization 1 (Fall, 1996) Quinebaug Community College 2 (Spring 1996) CAD/CAM 1 Ellis Regional Vocation Tech 1 Basic blueprint 1 Quinsigamond Community College 4 (Spring and Summer 1996) Computer applications 2 Introduction to CAD 1 Beginning Algebra 1 Leominster Center for Technical Education 1 Wire EDM Training 1 Assumption College 1 (Spring 1996) Behavior in Organizations 1 New Hampshire Technical College 2 (Fall 1996) Fitchburg State College 1 (Fall 1996) Writing I

ACTIVITY	METRO SOUTH/WEST SDA	NORTH CENTRAL SDA
	ITT Technical Institute 1 1 by 11/30/95 (electronics technology) Quincy College 1 Environmental Science 1 (01/96) RETS Electronic School 1 by 03/30/96 Electronics Communication 1 Clark University 6 2 by 03/30/96 (Computer & Information, Graphic & Printing Equipment Operation) 5 as of 07/15/96 Computer & Information Science 1 Graphic & Printing 1 Certified Networking Engineer (CNE) 3 6 as of 09/30/96 Minuteman Regional VocTech 2 1 by 03/30/96 Biomedical Technology 1	Quality Institute 4 Intro to ISO9000 2 (Summer, 1996) Total Quality Management 2 (Fall, 1996) Montachusett Regional Vocation Technical School 1 Introduction to CAD Becker Junior College 2 Intro to Computers 1 Biology 1
courses	Electrical/electronic equip 4 Auto/automotive mechanic 4 Electrical/electronic/camm 3 Graphic & printing equip 3 Business systems networking 3 Hydraulics technology/tech 2 Computer/installer/rep 2 Biomedical engineering/rel 1 Water quality/wastewater treatment 1 Biological Technology 1 Carpentry 1 Heating/air conditioning 1 Truck, bus & other commercial 1	Quality improvement 5 Injection molding 4 Computer aided design 4 Polymeric materials 2 Statistical process control 2 Introduction to computers 2 Introduction to ISO9000 2 Marketing 1 The Microsoft Office 1 Business Organization 1 Basic blueprint reading 1 Beginning algebra 1 Wire EDM training 1 Behavior in organizations 1 Writing I 1 Biology 1
academic institution	Assabet Valley Regional Vac Tech School Bay State School of Appliances Clark University ITT Technical Institute Keefe Technical School Minuteman Regional VocTech School New England Tractor Trailer School Quincy College RETS Electronics School TAD Technical Institute	Assumption College Becker Junior College Ellis Regional Vocational Technical Fitchburg State College Leominster Center for Technical Education Montachusett Regional Vocational Technical School Mount Wachusett Community College Nipro Institute Quality Institution of New England (thru MWCC) Quinebaug Community College Quinsigamond Community College

ACTIVITY	METRO SOUTH/WEST SDA	NORTH CENTRAL SDA
apprenticeship	carpentry apprentice	none available in geographical area
on-the-job (contracted, formal)		formal OJT at TRW, but not contracted
OUTCOME	METRO SOUTH/WEST	NORTH CENTRAL
Completed training	1 as of 01/31/96 1 reported as of 02/14/96 2 reported as of 03/30/96 3 reported as of 04/01/96 8 as of 06/30/96 electrical/electron/ comm 1 biomedical engineering 1 biological technology/tech 1 carpenter 1 electrical/electron equip 2 graphic & printing equip 1 business systems networking 1 12 as of 09/18/96 16 as of 12/01/96 18 as of 01/14/97 25 as of 02/28/97 3 dropped out of training	phase one as of 12/31/95 31 Plastics Technicians Phase III as of 01/31/96: 4 as of 06/30/96: 8 as of 09/18/96: 8 as of 10/23/96: 15 as of 01/03/97: 20
Training retention rate	89%	100%
Returned to school full-time	Associate Degree, Electronics Technology ITT Technical Institute	Associate Degree in Business Management Mount Wachusett Community College Associate's Degree, Quinsigamond CC
Returned to school part-time		Plastics Technician Certificate, NYPRO Bachelor's Degree, Assumption College
Completed Major Level of Education (i.e. GED, certificate, Associate Degree)	GED, Assabet Valley Tech	matriculated in Bachelor's degree program at Assumption College
Received academic recognition or award	student of the month, TAD Technical Institute class speaker at graduation (refrigeration appliance repair) at Assabet VocTech bronze medalist at VICA (Vocational Industrial Clubs of America) national appliance repair competition nomination for Adult Vocational Award by the Massachusetts Association of Vocational Administrators profile in school newsletter	A in injection molding at NYPRO A in Writing I at Fitchburg State College A in Introduction to Computers at Becker Junior College A in ISO 9000 course at Quality Institute of New England A in Beginning Algebra, Quinsigamond College B+ in Intro to Microcomputers at MWCC B in Behavior in Organizations at Assumption College \$500 scholarship to Quinebaug Community College
Received certification or registration	Commercial Driver's License Refrigeration Technician License	

The Participants' Perspectives

Summary of the Massachusetts Training Evaluation Form

Over one-third of the individuals enrolled in the North Central SDA returned their Training Evaluation Forms by July 3, 1996. The participants responded by rating statements on a five point scale: Strongly Agree, Somewhat Agree, Neither Agree Nor Disagree, Somewhat Disagree, Strongly Disagree. An analysis of the responses indicates that as a group the respondents agreed somewhat that the second phase of the training had been satisfactory.

- Over ninety percent of the eleven respondents felt that the course content was relevant to their present or future job.
- Of the respondents, ninety percent agreed that the training courses provided them with new ideas about what type of work they could do.
- Ninety percent believed that the training courses had provided them with a strong career foundation. Again, ninety percent affirmed that the training prepared them as well educationally as the people currently performing the jobs.
- Eighty percent of the respondents felt that the faculty of the training institution was interested in helping them. Almost one-half of the respondents strongly agreed with the statement: "The faculty of the training institution was very interested in helping me".
- Over seventy percent of the respondents felt that the training courses would help them find employment. Over one-third of the respondents strongly agreed with the statement: "The training courses will help me find employment".
- Over forty-five percent felt that the courses were too theoretical, not practical enough.
- Of the eleven respondents, only one-third agreed moderately that the training courses were too easy.

In summary, the eleven respondents viewed favorably the course content and the instructors. Six of the seven respondents, (86%), would definitely recommend the training program to a friend.

COMMENTS OF RESPONDENTS

Of the ten respondents, one-third affirmed that the training had provided them with the knowledge and skills they needed to perform the key functions of the occupation they had selected. Question Four

1. Has the training provided you with the knowledge and skills to do the key job functions in the occupation which you selected?

Three of the respondents said yes. Six indicated the need for more training while one stated her "career took an unexpected turn in another direction". Participants responded that they needed:

- more hands on experience
- more training - [it] has helped
- I need to continue my education so that I am marketable
- more computer training
- would have to take a lot of technical courses - more practical hands on training
- I was never introduced to a specific field in plastics that I could get a job with; but I learned a great deal about general work strategies
- No, because my career took an unexpected turn in another direction

2. What portion of the training program was the most valuable to you?

Out of the ten responses, seven thought that hands-on-training and vocational course work were most valuable. The remaining three felt that the self-esteem and job search training were of most value.

- the intro [introduction] class at L.T.S [Leominster Technical School].
- exposure to training at the high school
- injection molding course
- hands on [training] and visiting factories
- machine shops and classes in college
- the hands on training and self esteem workshops
- the input of various speakers and labs
- everything was valuable to me

3. What portion of the training program was the least valuable to you?

Out of the eight responses, four thought that the lectures were of least value to them, two thought the mentors were least valuable. Of the remainder, one thought mold polishing was least valuable and the other participant thought there was too many negative comments about males.

- some of the speakers
- the speakers not directly related to the plastics field
- lectures in phase I
- the training program was most valuable to me
- portions of low interest, i.e. mold polishing

4. How useful were the training materials?

Of the ten respondents, eight thought that the training materials were very useful, one that some of the materials were useful and the others were not useful and the remaining participant thought they were somewhat useful.

- somewhat helpful
- most materials are very useful and informative
- very useful
- very useful
- informative
- very [useful]
- quite useful
- most were very useful
- some good, some not
- the training materials were very useful because I learned technical concepts and more English at the same time

5. If you could make one change to improve this training, what would you change?

Out of the ten responses, five participants wanted more hands-on training. One respondent wanted apprenticeship. Another wanted better scheduling.

Another respondent wanted college training, one more specialization, and another participant wanted more involvement of welfare mothers.

- more hands on and more one on one with prospective employers about openings, wages, experience needed. How to get into the industries willing to train people
- lengthen training program at high school and extend college
- training long enough for people to complete, at least a certificate program so people are marketable - better scheduling of the first half
- more hands on training
- more hands on [training] and less fluff
- more hands on training such as apprenticeship
- less lectures, more hands on training
- continue to get more welfare mothers involved.
- It needs to be more specialized to a specific field according to a person's abilities and interests
- add more hands on training
- more practical training in academic courses

COMMENTS ON NCMREB FOLLOW-UP

Responses varied reflecting the needs of individual participants.

- I did not take a course. By the time I had decided what to do, the courses already started. I would really like to take a course if I could.
- I am an accountant in the injection molding industry. This course helped me understand the process and what my company does to make money.
- In the next two months, my workplace will be installing computers at every workstation. I needed this course to get a jumpstart. My workplace hopes to become ISO 9000 registered by March 1997.

- This course is so helpful. I intend to take an audit course also.
- Gave me a better perspective on how people interact in the business world. Also gave me a jump start to finish my education.
- I did not have a computer at home. I was unable to keep up with my assignments without a computer at home, so I dropped out of the course [Microcomputer Applications]
- the computer course was invaluable to me
- would have liked an apprenticeship to apply things I learned in class
- would have liked more hands-on and fewer speakers. Loved trip to plastics museum.

Training Evaluation Form

Please complete and give in a sealed envelope to the counselor/facilitator.

Question One: How much do you agree with each of the following statements about the second phase of your training?

Do you agree or disagree with the following statements? Please circle the response which most closely corresponds to your point of view. Directions: Read each item carefully.

- 1 = Strongly Agree
- 2 = Somewhat Agree
- 3 = Neither Agree Nor Disagree
- 4 = Somewhat Disagree
- 5 = Strongly Disagree

1. The training courses were too easy.	STRONGLY AGREE	1	2	3	4	5	STRONGLY DISAGREE
2. The training courses will help me find employment.	STRONGLY AGREE	1	2	3	4	5	STRONGLY DISAGREE
3. The training course content is relevant to my present or future job.	STRONGLY AGREE	1	2	3	4	5	STRONGLY DISAGREE
4. The faculty of the training institution was very interested in helping me.	STRONGLY AGREE	1	2	3	4	5	STRONGLY DISAGREE
5. The training courses were too theoretical, not practical enough.	STRONGLY AGREE	1	2	3	4	5	STRONGLY DISAGREE
6. The training courses gave me new ideas about the type of work I could do.	STRONGLY AGREE	1	2	3	4	5	STRONGLY DISAGREE
7. The training courses provided a firm foundation or basis on which to build. I know what I need to learn next.	STRONGLY AGREE	1	2	3	4	5	STRONGLY DISAGREE
8. My training prepared me as well educationally as people performing similar jobs to mine.	STRONGLY AGREE	1	2	3	4	5	STRONGLY DISAGREE

Training Evaluation Form

Question Two: Do you agree or disagree with the following statements?

Please circle the response which most closely corresponds to your point of view.

Directions: Read each item carefully.

Using the scale shown below, circle the number which best describes your belief.

- 1 = Totally Disagree
- 2 = Mostly Disagree
- 3 = Disagree somewhat
- 4 = Agree somewhat
- 5 = Mostly Agree
- 6 = Totally Agree

1. My mentor/trainers introduced me to people who work in my chosen field.	DISAGREE	1	2	3	4	5	6	AGREE
2. My mentor/trainers provided me information about formal work rules in this occupation/industry	DISAGREE	1	2	3	4	5	6	AGREE
3. My mentor/trainers explained the informal rules and expectations of this occupation/industry	DISAGREE	1	2	3	4	5	6	AGREE
4. My mentor/trainers provided me encouragement and support.	DISAGREE	1	2	3	4	5	6	AGREE
5. My mentor/trainers/instructors reviewed my resume.	DISAGREE	1	2	3	4	5	6	AGREE

Question Three: Would you recommend THIS training program to a friend?

Directions: Read each definition. Please circle the response which most closely corresponds to your point of view.

1 = Definitely Not

2 = Probably Not

3 = Might or Might Not

4 = Probably

5 = Definitely

DEFINITELY NOT 1 2 3 4 5 DEFINITELY

Question Four: In order to continue to improve training opportunities for women, we need your ideas, comments, and suggestions. Please respond to the following open-ended questions.

1. Has the training provided you with the knowledge and skills to do the key job functions in the occupations which you selected?

YES _____ NO _____.

If No, what else do you need to learn? _____

2. What portion of the training program was the most valuable to you? _____

3. What portion of the training program was the least valuable to you? _____

4. How useful were the training materials? _____

5. If you could make one change to improve this training, what would you change? _____



Placement

Placement

Job placement services were provided using different sources in each Service Delivery Area. The Metro South/West Service Delivery Area planned to use the contracted training institutions and the job listings of the Training and Employment Directory (T.E.D.) of the Division of Employment and Training for their job placement efforts. The North Central Massachusetts Regional Employment Board stated in the grant proposal that the employers in the Plastics Advisory Council would be utilized for job search and placement. Existing job search workshops were available in each SDA. The Metro South/West ETA Workforce Development Career Center offered the following workshops monthly:

Electronic Resumes	2 hours
Resume Development	2.5 hours
Networking the Hidden Job Market	2.5 hours
Interview Techniques	3 hours
Job Search Skills for the 90's	18 hours (3 days, each 6 hours).

The Career Center of North Central Massachusetts offered monthly workshops including:

The Job Club	2 hours
Writing Resumes and Cover Letters	3 hours
Resume Overview	3 hours
Interviewing with Confidence	3 hours
Starting the Job Search	3 hours

Customers of both centers had access to job listings in Massachusetts (T.E.D.) and the United States (America's Job Bank) as well as access to job listings on the Internet.

The Crafts, Repair and Technologies Program in South Suburban Boston

The Metro South/West (MSW) SDA stated in the grant proposal: "Both job search, employment practicum/apprenticeships and job placements are handled through each individually contracted program, but will also be accomplished through leads from the Division of Employment and Training job bank". The SDA projected a placement rate for graduates of seventy-five percent, wages at placement

between \$9 and \$21 per hour with benefits, and employment retention of ninety percent.

The catalogues of Assabet Valley Regional Vocational School, Bay State School of Appliances, Clark University, Quincy College, RETS Electronic School and TAD Technical Institute reported the availability of job placement assistance to students and alumnae.

Of the twenty-three participants with reported prior work histories, twenty-six percent (6 women) had previously worked in service occupations. Sales, administrative support and craft occupations each employed more than seventeen percent (4 women each) of the formerly employed enrollees. Almost nine percent of these participants (2 women) were formerly employed in professional jobs. Management, machine operative, and agricultural positions were each held by one woman.

Two women entered employment by late March, 1996. A graduate from Bay State School of Appliances secured employment as the Chief Maintenance Engineer at \$11.50 per hour with full benefits at a major hotel in the suburbs of Boston. A graduate of the Business Systems Networking program at Clark University obtained full-time employment at a developer of prepackaged medical software as a technical support specialist earning \$43,000 per year with full benefits.

By late June, seven women had obtained full-time employment with pension plans. Five women received medical insurance. One graduate of Assabet Valley Technical School with a certificate in carpentry found employment with a builder as a mold carpenter for \$14.04 per hour with full benefits. A second Assabet graduate accepted employment as a line supervisor for a temporary help supply service at \$8.50 per hour. Another woman who graduated from the biotechnology program at Minuteman Vocational Technical School obtained full-time employment with a manufacturer of diagnostic enzymes and biochemical products in production support services for \$10.94 per hour with benefits. A second Minuteman Tech

graduate from the biotechnology program obtained a job selling biomedical glassware for \$18,000 per year with full benefits. Upon completion of graphics and printing equipment training at Clark University, a participant found work as a painter/stripper/graphic designer at \$13.50 per hour with full benefits. The Management Information System of the Division of Employment and Training reported seven placements at an average hourly wage of \$12.20. The average hourly wage for the six placements in nontraditional occupations was \$13.23. The women found employment as:

technical support specialist	\$20.91/hr.
salesperson, general merchandise	\$12.00/hr.
supervisor, line	\$8.50/hr.
metal-fabricating-shop helper	\$10.94/hr.
graphics stripper	\$13.50/hr.
electrical appliance servicer apprentice	\$11.50/hr.
carpenter, mold	\$14.04/hr.

By the end of August, ten women had entered unsubsidized employment with an average placement wage of \$13.14 and benefits. In September, the MSW case manager reported: "Six women have been placed in jobs this quarter. Of the three graduates from TAD Technical Institute in auto mechanics, one client is working for thirty hours per week at a tire company at \$6.50 per hour with benefits. The second client is working full-time at the automotive services department of a national retail store at \$8 per hour with benefits and the third at a tire company at \$8 per hour with benefits. All these companies told me they have the opportunity for pay increases within six months to a year."

She continued "Another woman was at Assabet Vocational School for electrical wiring and obtained a job at a manufacturer of potentiometers doing assembly work. She is making \$8 per hour with benefits. Her supervisor is very pleased with her work and said there is an opportunity for her to increase her pay within one year. Two women graduated from Clark University; one in the Computer Network Engineer (CNE) Program has been placed at a software company as a programmer at \$8.20 per hour with full benefits. The other graduated in graphics and is work-

ing at a printing services firm as a painter/stripper/graphic designer at \$13.50 per hour with benefits”.

In early October, a graduate of the truck driving program at New England Tractor Trailer School secured employment as an order filler at \$7.80 per hour at a mailing services company. She was offered a future position as a truck driver upon receiving her commercial driver’s license. Another woman, who completed the business systems networking program at Clark, obtained a position as a policyholder clerk at an insurance company with hourly wages of \$8.17.

By early December, more than half of the Metro South/West enrollees (94% of those who had completed training) were employed. Gainful employment was obtained as:

technical support specialist	\$20.91
computer programmer	\$20.00
carpenter, mold	\$14.04
print stripper	\$13.50
hand painter	\$12.92
salesperson, general merchandise	\$12.00
electrical appliance servicer-apprentice	\$11.50
metal-fabricating-shop helper	\$10.94
line supervisor	\$8.50
policyholder information clerk	\$8.17
automotive maintenance equipment service	\$8.00
order filler	\$7.80
hand sewer	\$7.50
tire repairer	\$7.50
general repairer (automotive)	\$6.00

Two-thirds of the fifteen employed participants (10 women) found employment in precision production occupations. One fourth of the women were employed in professional and administrative support (2) occupations. One woman (7%) obtained a sales position. By early March, twenty-two individuals had found employment.

The average hourly wage of the twenty-two employed participants was \$10.59, ranging from \$6.00 to \$20.91 per hour. The two individuals employed full-time upon program entry increased their average

hourly wages by over twelve percent to \$8.07. Two women who were employed part-time on entering the program obtained full-time employment with twenty-one percent wage increases. The nine women with recent work history earned an average wage of \$12.01 per hour, a one percent increase over their 1995 wages. The two previously employed participants whose wages increased greater than ten percent completed courses at Clark University, one in business systems networking and one in graphics and printing equipment operation. Both were high school graduates. These women obtained positions as a computer programmer and print stripper. Previously, they had worked as a data entry clerk and a pre-print stripper.

Nine former welfare recipients earned an average wage of \$10.39 per hour. Six former welfare recipients obtained jobs paying greater than \$10 per hour as a painter, a metal fabricating-shop helper, a mold carpenter, an electronics tester, an electronics technician, and a general merchandise salesperson. The wages of the nine recently unemployed individuals averaged \$12.15, a two percent increase from their 1995 average hourly wages. By excluding the wages of three women who retained 83 percent of their prior earnings, the average wages of the remaining was \$11.10. These women’s average hourly wages increased by over nine percent. The participant with no prior work history received wages of \$6.00 per hour. The twenty women who found employment in training-related occupations earned an average hourly wage of \$10.80. The ten women employed in non-traditional occupations averaged \$9.80 per hour. The nontraditional positions included carpenter, mold (\$14.04), stripper (\$13.50), electrical appliance servicer-apprentice (\$11.50), electronics technician (\$11.00), metal-fabricating-shop helper (\$10.94), line supervisor (\$8.50), automotive maintenance equipment servicer (\$8.00), tire repairer (\$7.50), and general repairer, automotive (\$6.00).

The increase in wages permitted changes in lifestyles. The ten children of the eight single heads of household benefitted from the increased family income.

One single mother commented “I was on AFDC, I didn’t have a home, I was living with friends. I didn’t know what the future held for my children”. Fifteen graduates received medical and retirement benefits. One woman received medical insurance but no pension. Six women had pension plans or social security but no health insurance.

The Women in Plastics Program in North Central Massachusetts

The North Central REB stated in the grant proposal that “Following training, the Plastics Advisory Council will work with the women to provide job search and placement. Mark Technical Mold and MarLee Molds have both committed to assisting these women find employment at their own companies or at other firms in the local area, including Crisci Tool and Dye and Plastics”. The REB projected a placement rate for participants of seventy-six percent and wages at placement between \$7 to \$10 per hour.

Of the thirty-one enrollees in the Women in Plastics project, fifteen women were employed full-time (nine in plastics), four part-time, and twelve were unemployed (five on public assistance) at the time of enrollment. Twenty-seven (87%) had worked within the prior two years. Three women had worked at some point in their past and one had never worked. Twelve (44%) women with a recent work history had been employed in administrative support occupations, while over one-third (eight women) held machine operative jobs. Five (18%) had prior employment in service occupations. Professional and sales occupations each employed one woman. The average hourly wage of the fifteen employed individuals (with reported earnings) was \$10.37, with a range from \$5.65 to \$18.00. The wages were inflated by the average wage of \$12.40 per hour earned by the nine participants employed in the plastics industry. The wages of the remaining women averaged \$7.53 per hour.

Shortly after the start of the program, three women who were unemployed at the beginning of the program obtained employment. The REB Executive Director noted "All are in manufacturing and are technical in nature, although none is actually in plastics". One woman found employment as a mirror painter at \$7.00 per hour. (By January, she had lost her position due to cutbacks in work orders.) A second woman accepted a position as a field administrator for a coatings company at \$20,000, but was subsequently laid off due to lack of work. She remained in the program studying injection molding, blueprint reading and CAD. (Upon graduation, she obtained a job in wide area networking). A third participant obtained a job as an assembler. In November 1995, a bi-lingual woman was hired as a part-time file clerk at a bank. After four months, she was promoted to a full-time senior teller at \$9.50 per hour.

A single mother, who was employed at the start of the program and subsequently had her hours reduced to part-time, obtained a full-time position as a customer service representative at \$24,000 with benefits in January. The Quarterly Performance Summary, produced by the Management Information Systems Unit of the Division of Employment and Training showed four women entered unsubsidized employments with an average placement wage of \$8.28 per hour. (AFDC recipient at \$7.56, 1 long term unemployed at \$9.06, 1 UI claimant at \$9.50, 1 woman with no work history at \$7.00)

In February 1996, an employed participant who was laid off while in training accepted a position as an applications engineer at \$35,000 per year at a manufacturer of high accuracy pressure transducers and digital pressure gages. (NOTE: This job change was counted in MIS as an employability enhancement). She subsequently bought a new house.

In the March report, the REB Director stated "As it turned out, Ms. Pollack [mentor from TRW] was able to give our participant a job on the injection molding line at \$7.21 an hour and then she was able to trans-

fer to mold polishing training". This participant had job shadowed with a mold polisher in the firm in January. (Her supervisor had conducted the mold polishing seminar at the Leominster Center for Technical Education.) In the same report the REB Director commented "Assistance with job development or actual job placement would be helpful".

By the end of March, six women had entered employment. By late June, two additional women had found employment, one of whom had been laid off for six months. The eight placements recorded in June included:

customer service representative	\$11.54
quality control technician	\$9.50
inspector	\$9.06
assembler	\$7.56
injection molding machine operator	\$7.21
file clerk	\$7.00
electronics tester	\$7.00
painter, mirror	\$7.00

The average hourly wage of the eight women was \$7.48. The five women placed in nontraditional employment earned an average hourly wage of \$7.77. Three received employment with benefits and two reported employability enhancements.

As women completed their course work, their job search pace increased. Job placement assistance was available to students and alumnae of Mount Wachusett Community College, Becker College, Assumption College, and Fitchburg State College. In the beginning of June, the REB Director sent a letter to fifty-one employers in plastics and related industries requesting job placement assistance.

During the summer, participants actively sought employment. One participant commented on her job search: "I applied for two 'nontraditional jobs', had one interview but didn't get the jobs. BUT I did have the courage to try and I will again". Another reported "I am a quality control inspector ... making \$12 an hour. I like my job very much. We're very busy and I am working a lot of overtime getting paid time and a half". A third woman wrote "I am working at a

telecommunications company as a project administrator. This is a move up for me, and for the first time in my life I have business cards!". A fourth who found employment as a building department clerk noted "I got the job out of 41 applicants. Start at \$9.65 per hour with full benefits with continuous increases throughout the first year to a total \$11.20 by July 1, 1997". By the graduation ceremony on July 12, 1996, six additional women reported employment:

engineering project administrator	\$16.00 with benefits
accounts payable clerk	\$10.00 with benefits
busdriver	\$5.75
building department clerk	\$11.20 with benefits
bookkeeper	\$16.00 with benefits
construction clerk	\$11.00 with benefits

During September, the woman employed as a busdriver took a new position as an assistant teacher at a daycare center for an hourly wage of \$7.50. A participant was hired in November as a sorter in the plastics industry at \$7.70 per hour through the intervention of the human resources manager. Another woman who obtained a position as an accounting clerk at an environmental firm explained "My courses in Quality and ISO 9000 helped with getting this job". In the September report, the REB Director reported that "the staff have begun to contact participants to follow-up on their education and job status, and to remind them to avail themselves of the services of the Career Center when they start their job search. Thus far fifteen participants have terminated the program. Of these, thirteen have gotten jobs at an average wage of \$7.96 per hour, and the other two obtained employability enhancements".

During December, REB staff contacted participants by mail and by telephone to follow-up on their education and employment status, and to remind those not already employed to avail themselves of the job assis-

tance services of the Career Center of North Central Massachusetts. The December 1996 report recounted that thirty-one women had enrolled in the program, thirty women terminated positively and one additional positive termination was expected after December thirty-first. The MIS system showed that 96.7% had positive terminations. According to the MIS system, twenty women found new jobs for a sixty-seven percent entered employment rate. Nine women reported benefits. The average wages were \$9.50 per hour. Nine women received an "employability enhancement" (an increase in wages or a promotion received by participants employed at the beginning of the program) and completed the program objectives.

By early December, twenty-eight participants were working for an employment rate of ninety percent. The average hourly wage of these individuals was \$10.38 with a range from \$6.50 to \$18.00. One half of the employed (fourteen) worked as machine operatives and five (almost one out of six) found employment in administrative support positions. Two each were employed as professionals, managers, and service workers. Service, precision production, crafts and assembly work each employed one woman.

Seven of the nine individuals not in the labor force at the beginning of the program had found jobs paying hourly wages averaging \$7.86 per hour and ranging from \$6.00 to \$10.30 per hour. Two previously unemployed women returned to college full-time. The average hourly wage of the seven former welfare recipients was \$7.64. Employed in machine operative and precision positions, they earned from \$7.00 to \$10.50 per hour.

Upon completion of the training program, many of the participants experienced income gains. By December 1996, the incomes of fourteen of the twenty-eight employed women (50%) increased. The women who were working part-time at the start of the program increased their average hourly wages by more than twelve percent to \$8.88. Three of the women obtained full-time jobs and the fourth worked almost

the equivalent of full-time. Eight women who found employment in non-plastics industries increased their average wages by almost twenty-five percent to \$10.78 per hour, (wages ranged from \$6.50 to \$16.83 per hour). The thirteen enrollees employed in the plastics industry earned an hourly average wage of \$11.74. Wages of eight women employed upon enrollment averaged \$10.54 per hour, an increase of 32 percent. The seven individuals who received public assistance and four unemployed individuals joined nonsubsidized payrolls. Two women who left employment in the plastics industry for related employment in the electronics industry received hourly raises of \$4.70 and \$3.35 respectively.

Five women obtained employment in nontraditional occupations: applications engineer, engineering project administrator, mold polishing mechanic, painter and photo reprinter. The thirteen women employed in the plastics industry worked in the following positions: accountant, assembler, customer service representative, first shift supervisor, group leader, machine operator, mold polishing mechanic, quality assurance engineer, quality assurance leadperson, quality control inspector, set-up person, and sorter. Eight women found employment in nontraditional industries: accounts payable clerk, applications engineer, building department clerk, senior electronics quality control inspector, electronics solderer, engineering project administrator, and photo reprinter. Two individuals obtained positions for which their increased English language facility was an asset: library aide and senior teller. Other positions obtained included restorative aide and assistant teacher.

The increase in wages accelerated lifestyles changes. Four single heads of household with ten children under age eighteen increased family incomes. One woman purchased a home. Another participant commented "Now I can afford to pay all my bills. Before I was so behind on my bills. My rent was always late. My light bill was always high. Everything is all caught up. It makes me feel good" She added "My son had to take free lunch at school, and he wouldn't take it. He would rather go without lunch than take a free

lunch. Now that I'm working, I can give him lunch money every day. And it's good".

In summary, twenty-eight women were employed. The earnings of fourteen women increased. Since starting new employment, five women received wage increases and seven women were upgraded.

RECOMMENDATIONS:

1. Explain to participants the creation of job openings, new positions and replacement needs.
2. Hold intensive job search workshops on reading the classifieds and cold calling.
3. Hold workshops on career networking.
4. Utilize multiple job search intermediaries including training instructors, placement services of training institutions, and the employment service.
5. Job develop for openings with benefits.
6. Send brief profiles of graduates to employers in appropriate industries.
7. Develop marketing tools for employers explaining the benefits of trained workers, i.e. increased productivity, improved retention, reduced training costs.
8. Provide on-going support and follow-up services after the training is completed until placement is achieved.

Project Flow Evaluation

ACTIVITY	METRO SOUTH/WEST SDA	NORTH CENTRAL SDA
Job Placement		
Job search training	available at Career Center and one-on-one not formal—ISP workshop covered	available at Career Center -not formal - part of overview BSSC gave an career development
resume preparation	same schools, available at Career Center and one-on-one	available at Career Center
cold calling	INA* informational interviewing	INA*
Job development		
SDA	one-on-one	letter to employers
training institution	same training institutions	INA
employment service	available—instationed DET staff	available—co-located DET staff
employer advisory board	na	yes - TRW
other	na	guest speakers, mentors -Res-Tech, NYPRO
Job Placement		
training institution	contractor provided	na
SDA	available	available
employment service	available	available
employer advisory board	na	yes
other	na	newspaper (3), friend (1)
self	yes	participant applied at NYPRO
Placements (entered employment)	7 as of 06/30/96 10 as of 08/96 12 as of 09/17/96 16 as of 12/31/96 22 as of 03/06/97 1. (unemployed electrician - high school grad) - Chief Maintenance Engineer, (electrical appliance servicer apprentice) large hotel \$11.50 hr full benefits earnings through fourth quarter, 1996-\$21,892.59 2. (unemployed manager) technical support specialist, developer of prepackaged medical software-\$43,000 per yr., full benefits 03/19/96 - \$12.20 as of 06/30/96 - \$13.01 as of 09/17/96 3. (food preparation worker) general repairer tire company at \$6.00 09/04/96 4. (not in work force -high school grad) - presentation company -hand painter \$12.02 08/19/96 earnings through fourth quarter, 1996-\$4,629.00 5. (high school grad -farmer pre-printing stripper at \$12.00 hr) - stripper at printing company - \$13.50 04/29/96 earnings through fourth quarter, 1996-\$20,447.79	8 as of 08/30/96 8 as of 08/18/96 (5 training related) 1/2 (15) working as of 05/16/96 20 as of 12/31/96 7 employed since beginning 1. (age 38, married, disabled, 2 children, no prior work history) glass painter started 10/09/95 \$7.00 -laid off due to lack of work 2. (age 25, bilingual, 3c, welfare, AFDC wage equivalent \$3.37) -machine operator at \$7.56 with manufacturer of custom precision injection molded components -third shift (06/96) plastics wages increased to \$9.50 per hour as machine operator. \$10.30 per hour as an assembler (temporary) 3. (age 36, community college, secretary at \$11) - first placement as engineering project field administrator at communications company @ \$20,000 - laid off lack of work - \$9.50 hr -second placement wide area networking -\$32,000 per year -\$15 per hour received job upgrade

*INA=information not available

ACTIVITY**METRO SOUTH/WEST SDA****NORTH CENTRAL SDA**

6. (former agricultural worker - high school grad)-
order filler, mailing services company at \$7.80
10/14/96
earnings through fourth quarter, 1996-\$2,658.92
7. (high school grad -former plumber's helper at
at \$9.00 hr.)
earnings through fourth quarter, 1996-\$6,895.33
line supervisor temporary help services
company at \$8.50 02/23/96
8. (11th grade -unemployed - former driver at
\$7.10 hr) hand sewer at potentiometers manufacturer
at \$7.50 08/05/96
earnings through fourth quarter, 1996-\$5,993.85
9. (bilingual, counterperson at fast food store, college
graduate abroad) policyholder -information clerk,
insurance company at \$8.17 10/01/96
10. (high school grad -counselor at \$8.46)
automotive maintenance equipment servicer, tire
company at \$8.00 07/08/96
earnings through fourth quarter, 1996-\$4,050.00
11. (AFDC, 11th grade, last employed 1989)
metal-fabricating-shop helper, manufacturer of
diagnostic enzymes and biochemical products
\$10.94 05/28/96
12. (AFDC, high school grad - no work history)
tire repairer at automotive services division of major
national retailer at \$7.50

4. (bilingual, age 37, 11th grade, 3c) P.T. file clerk
promoted to FT senior teller, bank at \$9.00 hr.
5. (age 52, married, unemployed QC inspector
at \$8.50)-electronics senior quality control
inspector, electronics company- @ \$9.69 hr.
\$12 by 07/12/96
earnings through fourth quarter, 1996-\$33,306.05
6. (age 44, 1 yr community college, 1c, administrative
assistant) customer service representative, plastics
company - plastics industry - \$24,000 yr started
01/15/96 \$11.54 benefits - \$12 with benefits
as of 07/12/96
7. (AFDC, mother of 5, unemployed since 1993)
mold polishing mechanic at \$7.21 hr, manufacturer
of precision steel injection molds for plastic industry
8. (PT counter helper at sandwich shop at \$5.25)
first placement as bus driver \$5.75 (07/96),
second placement assistant teacher at day care
center at \$7.50 per hour (12/12/96)

Placements (entered employment)

13. (AFDC, 11th grade, 1child, former cashier)
mold carpenter at builder at \$14.04 06/24/96
14. (college grad, AFDC, 2c, former chemist)
salesperson general merchandise \$12.00
06/10/96
15. (high school grad, former data entry clerk)
computer programmer software company
\$20.00 07/22/96
earnings through fourth quarter, 1996-\$8,593.99
16. electronics technician at temporary employment
services agency at \$11.00
earnings through fourth quarter, 1996-\$616.00
17. diesel mechanic at service station at \$8.50
18. admissions evaluator at vocational high school
at \$12.00 01/01/97
19. (AFDC, 12th grade, 1c clerk) route clerk at courier
service at \$9.00
20. (AFDC, 12th grade, 2C, no work history)
electronics tester at communications company
at \$11.00
21. (12th grade, 5c, sales associate p.t.)
component assembler at miscellaneous manufacturer
at \$7.00 10/31/96

9. (PT bookkeeper at \$9.65)-computerized
accounts payable travel accounting in
environmental firm at \$10 per hour- started 06/19/96
at \$9.62
10. (secretary facing layoff at \$9.00 hr.)
building department clerk in construction firm
at \$11.20 per hour (DOT 201.362.010)
- started 06/05/96 - quit 09/18/96
11. (bilingual) inter-library loan computer entry clerk at
public library, \$8.80 hr.
12. (PT rehab aide at \$7.55) - healthcare restorative
aide P.T. present earnings: \$8.25 - started at \$7.55 - 2
raises since start of program-received raise of \$0.55 an hr.
13. (assistant foreperson at \$11.50, started in plastics
industry in 1985 at \$5.00) promoted to division
supervisor, first shift \$11.70 plastics industry
14. (bookkeeper at \$13) accountant \$36,000 started
at \$22,000 - 3 raises since started program in injections
molding industry -plastics industry - pay increase to \$16
- 10/95 \$3,000 merit 04/96 title changed to
accountant with \$3,000 merit 10/96 \$3,000 merit

ACTIVITY**METRO SOUTH/WEST SDA****NORTH CENTRAL SDA**

22. Second quarter, 1996 \$83.74
courier service
23. 1996 four quarters: \$21,953.21 at
temporary help service

15. (bilingual, PT ticket marker at \$5.65 in a closing
retail store) started 02/20/96 electronic solderer
\$6.50 hr. (DOT 726.685.010) electronics component
manufacturer - job related - electronics
earnings through fourth quarter, 1996 \$11,544.41
16. (unemployed AFDC since 1983) photo reprinter at
\$7.00 hour printing company,
17. (unemployed AFDC since 1993) - electronics tester
at large manufacturer of injection molding of
engineered thermoplastics -started at \$9.00, raised to
\$10.50 per hour -plastics industry
18. (unemployed since 1986, AFDC) FT sorter,
manufacturer of precision steel injection molds for
plastics industry -plastics \$6.00 hr (through Janice Pollock).
19. (AFDC - wage equivalent \$3.04 -unemployed since
1995, former waitress) - PT - 25 hrs - \$7.00 hr plus
benefits at community hospital 02/13/96
earnings through fourth quarter, 1996 \$6,415.15
20. (unemployed since 1995 - former estimator
assistant) FT painter at \$9.06 hr.
21. (engineer in plastics company - position in jeopardy -
no wage listed, wanted to take CAD/CAM)
new position: applications engineer, manufacturer of
transducers and gauges at \$35,000

(no change in employer)

**EMPLOYED IN PLASTICS UPON ENTRY AND AT
COMPLETION**

1. (group leader \$10.80) - received salary increase of
\$936 per year - now \$11.25 per hour
2. (machine operator, n.w.l.)
3. (QA Engineer \$18)
4. (set-up person \$12)
5. (QA leadperson \$12)
6. (bilingual plastics inspector @ 11.50-hr.) - had wage
increase plus obtained new position as PT Spanish
teacher at \$20 per 1.5 hour session - 4-6 hours per
week at language center

Wages

\$12.20 as of 06/30/96
\$13.14 as of 08/30/96
\$10.38 as of 12/11/96
\$11.21 as of 01/14/96
\$10.59 as of 03/06/97

\$8.52 as of 12/31/95
\$11.24 as of 07/12/96 (self-reported)
\$7.48 as of 08/30/96
\$7.48 as of 09/18/96
\$7.96 as of 10/23/96
\$8.36 as of 11/18/96
\$8.93 as of 12/31/96
\$9.50 as of 01/14/97

Project Flow Evaluation

OUTCOMES	METRO SOUTH/WEST SDA	NORTH CENTRAL SDA
Prior Work Experience	Number of enrollees: <u>27</u>	Number of enrollees: <u>30</u>
Employment by occupational classification	POST TRAINING Number of managers: <u> </u> Number of professionals: <u>4</u> Number of technicians: <u>1</u> Number of sales: <u>1</u> Number of administrative support: <u>4</u> Number of service: <u>1</u> Number of precision production: <u>11</u> Number of machine operators: <u> </u> Number of assemblers: <u> </u> Number of unskilled laborers: <u> </u>	POST TRAINING Number of managers: <u> </u> Number of professionals: <u>3</u> Number of technicians: <u> </u> Number of sales: <u> </u> Number of administrative support: <u>8</u> Number of service: <u>1</u> Number of precision production: <u>1</u> Number of machine operators: <u>7</u> Number of assemblers: <u> </u> Number of unskilled laborers: <u> </u>
Terminations	17 as of 12/11/96 18 as of 01/14/97 28 as of 03/06/97	17 as of 11/18/96 30 as of 12/31/96 31 as of 02/28/97
TOTAL ENTERED UNSUBSIDIZED EMPLOYMENT	15 as of 12/11/96 16 as of 01/14/97 17 as of 01/23/97 22 as of 03/06/97	14 as of 11/18/96 16 as of 12/31/96 20 as of 01/14/97
Entered Employment Rate	79% as of 03/06/97	67% as of 03/06/97
Entered unsubsidized employment in occupation for which trained	15 as of 12/31/96 20 as of 02/28/97	9 as of 12/31/96
Entered unsubsidized employment in occupation related to training	0	4
Entered unsubsidized employment in industry for which training received	17 as of 01/23/97	7
Entered unsubsidized employment in industry related to training received	2	3
Entered unsubsidized employment in unrelated occupation and industry	1	5
Entered Employment < 20 hrs per week	0	0
Entered subsidized employment	0	0
Employability enhancement	1 as of 12/31/96 3 as of 03/06/97	2 as of 06/30/96 3 as of 11/18/96 9 as of 12/31/96 10 as of 03/06/97
Completed Program Objective	1 as of 03/01/96 2 as of 03/06/97	9 as of 01/14/97 10 as of 03/06/97
Employment rate	82% of terminations as of 02/28/97	84% of terminations as of 02/28/97 (included 6 employed in plastics industry upon enrollment and upon program completion.)

OUTCOMES	METRO SOUTH/WEST SDA	NORTH CENTRAL SDA
Other Terminations Beyond Program Control	1 moved, 1 loss of contact	1 moved
(i.e moved, illness, incarceration)	1 medical leave	
Average pre-training wage	\$9.87 (16 individuals reported)	\$9.68 (20 individuals reported-including employed)
Average starting wage	\$10.59 as of 02/28/97 (22 individuals)	\$9.50 as of 01/14/97 (20 individuals)
Average wage after 13 weeks		
Average wage after 52 weeks		
Number receiving post-placement raises	3 as of 03/03/97	7 as of 01/14/97
Wages with benefits	16 as of 01/14/97 21 as of 03/06/97	5 as of 11/18/96 9 as of 9/14/97
Wages plus health insurance benefits	1 as of 03/06/97	5 as of 11/18/96
Placement Retention rate	followup not complete	followup not complete
At 52 week followup, employed with same post-training employer	2 as of 03/13/97	13 as of 03/13/97
At 52 week followup, employed with same post-training employer in different position, but same occupation		
At 52 week followup, employed with same post-training employer in different occupation		
At 52 week followup, employed with different post-training employer	1 as of 03/13/97	1 as of 03/13/97
At 52 week followup, employed with different post-training employer in same occupation		
At 52 week followup, employed with different post-training employer in different occupation		
At 52 week followup, returned to school		
At 52 week followup, unemployed		
At 52 week followup, income increased	3 as of 03/13/97	7 as of 03/13/97
Lifestyle improvements, i.e. purchase of a car, improved living quarters, etc.		participant bought a home in central Massachusetts

The Participants' Perspective

The Massachusetts Placement Evaluation Form

Over one-fifth of the individuals enrolled in the North Central Service Delivery Area (SDA) had returned their *Placement Evaluation Forms* by November 12, 1996. These respondents represented one-half of the entered employments as reported in November, 1996. The participants rated statements on a five point scale: Strongly Agree, Somewhat Agree, Neither Agree Nor Disagree, Somewhat Disagree, Strongly Disagree. An analysis of the responses indicated that, as a group, the respondents were satisfied with the outcomes of their training.

- Over eighty percent of the respondents affirmed that the training program was relevant to their present job.
- Over two-thirds of the respondents agreed that the training program had made them employable. Two respondents strongly agreed that the program had improved their employability.
- One-third of the respondents strongly agreed that they were working in jobs directly related to their training. Twenty percent strongly agreed that they were working in a job somewhat related to their training.
- One respondent strongly agreed that she was working in an occupation related to the plastics industry for which she trained. Another respondent affirmed that she was working in an industry related to her training.
- Over seventy percent stated that they were receiving health insurance benefits from their employer. One individual strongly disagreed. Two individuals noted that health insurance was optional and that they had family coverage.
- Over eighty percent of respondents affirmed that they belonged to their employer's pension plan, while the remainder did not belong to a pension plan.
- The average wage of the six respondents reporting earnings was \$12.32 per hour, ranging from \$8.25 to \$17.18. This was well above the targeted wage of \$7.00 per hour. The average hourly starting wage reported was \$10.21, with a range from \$5.00 to \$15.27. Three respondents indicated they received

raises and three reported a job upgrade since starting the training program. In summary, the seven respondents reported positive training program outcomes, including wages and job upgradings.

The participants were asked to rate the benefit of various job search methods for finding employment.

- Self-initiated job search activities were viewed favorably by program participants. Three respondents were very satisfied with the results of filling out applications. Two participants indicated they were very satisfied with the outcomes of approaching the employer directly. Two respondents were very satisfied sending out resumes. Placing or answering classified ads was rated as a very satisfactory job search method by two participants.
- Instructors were rated as the most effective intermediaries. Two participants were very satisfied with the leads and referrals from training instructors. One respondent rated the leads and referrals from friends as very satisfactory in her job search. Three participants were very dissatisfied with the lack of leads and referrals from mentors.
- The rankings of the effectiveness of employment institutions were tepid. Two participants were somewhat satisfied with the assistance of the public employment service agency. One participant was somewhat satisfied with the efforts of a private employment agency. Another participant was very satisfied with the resources of the service delivery area agency.
- Four respondents reported the actual method used to obtain employment. Three found jobs through newspaper advertisements and one through the referral of a friend.

Five of the six respondents (83%) would definitely recommend the training program to a friend. The remaining participant would probably recommend the training program to a friend.

COMMENTS OF RESPONDENTS

- *Thank you for this opportunity to enhance my job search skills.*
- *Additionally, when I explored jobs in this field [plastics] they were all very low paying (\$6.50), and they were requiring experience.*
- *Getting a job was most valuable to me*
- *Women in Plastics led to this new position due to my increased knowledge in the field and continuing education.*

Placement Evaluation Form

LOCATION: _____ LAST 4 DIGITS OF SOCIAL SECURITY NUMBER: _____

Question One: Now that you have completed your training, how much do you agree with each of the following statements?

Directions: Read each item carefully. Do you agree or disagree with the following statements? Please circle the response which most closely corresponds to your point of view.

1 = Strongly Agree

2 = Somewhat Agree

3 = Neither Agree Nor Disagree

4 = Somewhat Disagree

5 = Strongly Disagree

- | | | | | | | | |
|---|----------------|---|---|---|---|---|-------------------|
| 1. The training program helped me become more employable. | STRONGLY AGREE | 1 | 2 | 3 | 4 | 5 | STRONGLY DISAGREE |
| 2. The training course was relevant to my present job. | STRONGLY AGREE | 1 | 2 | 3 | 4 | 5 | STRONGLY DISAGREE |

Question Two: Do you agree or disagree with the following statements?

Please circle the response which most closely corresponds to your point of view. Directions: Read each item carefully. Using the scale shown below, circle the number which best describes your belief.

1 = Strongly Agree

2 = Somewhat Agree

3 = Neither Agree Nor Disagree

4 = Somewhat Disagree

5 = Strongly Disagree

- | | | | | | | | |
|---|----------------|---|---|---|---|---|-------------------|
| 1. I am working in a job directly related to my training. | STRONGLY AGREE | 1 | 2 | 3 | 4 | 5 | STRONGLY DISAGREE |
| Title of job _____ | | | | | | | |
| 2. I am working in a job somewhat related to my training. | STRONGLY AGREE | 1 | 2 | 3 | 4 | 5 | STRONGLY DISAGREE |
| Title of job _____ | | | | | | | |
| 3. I am working in the industry for which I was trained. | STRONGLY AGREE | 1 | 2 | 3 | 4 | 5 | STRONGLY DISAGREE |
| Title of industry _____ | | | | | | | |
| 4. I am working in on industry related to the industry for which I was trained. | STRONGLY AGREE | 1 | 2 | 3 | 4 | 5 | STRONGLY DISAGREE |
| Title of industry _____ | | | | | | | |
| 5. I am receiving health insurance benefits from my employer. | STRONGLY AGREE | 1 | 2 | 3 | 4 | 5 | STRONGLY DISAGREE |
| 6. I belong to my employer's pension plan. | STRONGLY AGREE | 1 | 2 | 3 | 4 | 5 | STRONGLY DISAGREE |

I am presently earning: _____

I started my job earning: _____

I have received _____ number of raises since I started the training program (check _____) or completed the training program (check _____).

I have received a job upgrade: (yes) _____ (no) _____ since I started the training program (check _____) or completed the training program (check _____).

Placement Evaluation Form

Question Three: How beneficial were each of the following job search methods for finding your job?

Directions: Read each definition. Please circle the response which most closely corresponds to your point of view.

1 = Very Satisfied

2 = Somewhat Satisfied

3 = Neither Satisfied Nor Dissatisfied

4 = Somewhat Dissatisfied

5 = Very Dissatisfied

1. Approaching the employer directly.	VERY SATISFIED	1	2	3	4	5	VERY DISSATISFIED
2. Sending out resumes	VERY SATISFIED	1	2	3	4	5	VERY DISSATISFIED
3. Filling out applications	VERY SATISFIED	1	2	3	4	5	VERY DISSATISFIED
4. Placing or answering classified ads.	VERY SATISFIED	1	2	3	4	5	VERY DISSATISFIED
5. Getting leads from relatives or friends.	VERY SATISFIED	1	2	3	4	5	VERY DISSATISFIED
6. Getting leads and referrals from training instructors.	VERY SATISFIED	1	2	3	4	5	VERY DISSATISFIED
7. Getting leads and referrals from mentors.	VERY SATISFIED	1	2	3	4	5	VERY DISSATISFIED
8. Using the public employment service agency.	VERY SATISFIED	1	2	3	4	5	VERY DISSATISFIED
9. Using a private employment agency.	VERY SATISFIED	1	2	3	4	5	VERY DISSATISFIED
10. Using the resources of the service delivery area.	VERY SATISFIED	1	2	3	4	5	VERY DISSATISFIED

I found my job through _____ or by _____.

I need assistance in finding the right job for me. (yes) _____ (no) _____.

Question Four: Would you recommend THIS training program to a friend?

Directions: Read each definition. Please circle the response which most closely corresponds to your point of view.

1 = Definitely Not

2 = Probably Not

3 = Might or Might Not

4 = Probably

5 = Definitely

Thank you very much for taking the time to complete this survey.

Your responses are important to the Women's Bureau, United States Department of Labor.

Feel free to add below any additional comments on this program.



Summary

Summary

Because of a lag in reporting, it is premature to evaluate the full impact of the program. As of late December, 1996, a positive impact on thirty of thirty-one participants in the North Central SDA had been demonstrated. By March 1997, ninety-three percent of the program completers were employed. Eighty-eight percent of those women who completed training in the Metro South/West program had entered employment.

Recruitment

In the recruitment phase of the project, the training sponsors appear to have been ambitious. Each SDA proposed to extend outreach and recruitment efforts to one hundred-fifty women. This number was almost equal to one-half of the total Metro South/West SDA female participants (286) enrolled in JTPA Title II-A training between July 1995 and June 1996. The total number of North Central SDA registered female trainees between July 1995 and June 1996 was one hundred seventy-five. Fifty-four women attended the recruitment open house at the Leominster Center for Technical Education in September. Eighteen of the thirty women interviewed by the Metro South/West Case Manager by October were accepted to the program. Each SDA engaged in extensive recruitment to encourage women to consider nontraditional careers. The most successful methods of recruitment included newspaper advertisements, reverse referrals from admissions representatives to the training sponsor, area employers, the public welfare office, the service delivery area, and the state employment office.

Retention

Each SDA projected that one hundred women would be provided with intake, counseling, and assessment. In the grant proposal, it was inferred that these services would be provided before women were enrolled in the project. The North Central SDA stated that thirty-five individuals would be interviewed and selected. Thirty-seven women were interviewed, thirty-one enrolled in the program, and six were selected as alternates.

The case manager of the Metro South/West SDA provided individual counseling to the participants in the nontraditional occupations (NTO) training project. Twelve participants were assessed using the Systems for Assessment and Group Evaluation (SAGE). A series of workshops was held in each SDA to help the women prepare for the challenge of working in a nontraditional environment. The group workshops covered cultural barriers, time and stress management, returning to school, self-esteem, industry trends, and communications. Sixteen attended these workshops in the Metro South/West. Seventeen women completed additional sexual harassment, assertiveness, and health and safety workshops.

Twenty-seven (87 % of the enrollees) North Central participants completed the series of workshops. The women strongly recommended the self-awareness and self-esteem workshops. The mentoring component was particularly difficult to implement because of the small pool of women employed in nontraditional occupations who were willing to make the time commitment. The ratio of mentors to proteges was one to four. Some participants had positive mentoring experiences. One respondent reported that the mentor had changed her life. Two participants obtained employment at a company for which their mentor worked. Each SDA projected that fifty women would transition from assessment to training and education. Twenty-eight MSW women participated in the nontraditional occupations (NTO) training program sponsored by the Women's Bureau. Between July 1, 1995 and June 30, 1996, an additional twelve women participated in SDA sponsored nontraditional training. In the North Central SDA project, thirty-one registrants enrolled. However, none of the remaining SDA registrants enrolled in SDA-sponsored nontraditional training.

Each SDA was prepared to provide pre-vocational training. The majority of the participants did not need remedial education. One MSW participant obtained her General Educational Development (GED) Equivalency Certificate. Another participant in the North Central project completed remedial training in algebra.

Each SDA anticipated that thirty women, aged 22 and older would enroll in the program. The MSW SDA enrolled twenty-eight women. The North Central REB enrolled thirty-one, one more than planned.

The Crafts, Repair and Technologies Program in South Suburban Boston Skills Training

The Metro South/West proposed to enroll thirty women in individualized customized training including automotive technology, electrical, construction, lab and electronic technologies (biotech, environmental, and health), small appliance repair, and optometric/ophthalmic manufacturing, service, and repair. Thirty enrollments were expected in automotive technology (5), lab and electronic technologies (5), small appliance repair (5), optometric/ophthalmic repair (5) and construction (10).

The Metro South/West SDA provided training opportunities to twenty-eight women in nontraditional programs. Enrollments included electrical, electronics/communications training (3 women), automotive mechanics (4), small appliance and electrical repair (7), laboratory technologies (5), and carpentry (1). The remainder enrolled in nontraditional programs including data processing (4) [the source of one-fourth of SDA services employment], graphics and printing equipment (2), and truck driving (1). The computer facilities training program, although traditional, offered high wages in occupations with favorable outlooks. The training program retention rate was ninety-six percent, much higher than the seventy percent retention rate of non participants.

Between July 1995 and June 1996, five percent (12 women) of the non participants received nontraditional training. Ninety-two percent completed training in information sciences and systems (1), computer maintenance technology (1), heating, air conditioning, and refrigeration (1), engineering/related tech-

nology (2), biotechnology research (2), and computer installation and repair (1).

In the proposal, the North Central SDA anticipated that forty women would participate in the career path component. Thirty-one women enrolled.

The North Central REB proposed to train 30 women of at least twenty-two years of age for occupations in the plastics industry. Thirty-one women enrolled in the Plastics Technology/Technician program. Emphasis was placed on developing transferrable skills in a variety of nontraditional occupations in the plastics industry. The program plan was to train women for mold polishing, machine tools programming, machining, quality assurance, purchasing and sales positions. The participants rotated through hands-on workshops on machining, computer-assisted design, and computer processing. The women participated in mold-polishing seminars. The Phase Two training retention rate of ninety-seven percent compared favorably to a sixty-five percent training retention rate for non-NTO enrollees.

Utilizing the individual referrals to training institutions, twenty-one women enrolled in courses on injection molding, polymeric materials, statistical process control, computer applications, introduction to ISO 9000, total quality management, and wire electronic discharge machining.

Placement

In the grant proposal, the Metro South/West SDA aimed to place seventy-five percent of the program trainees (23 women) in nontraditional occupations. By March 1997, twenty-two participants had entered unsubsidized employment. Eighty percent of the training completers found training-related employment. Three employability enhancements were recorded. (Cross matching with the quarterly wage and employment status database revealed that the participant who dropped out of the program had been employed at two temporary help agencies and earned \$21,953 between the second quarter of 1995 and the fourth

quarter of 1996.) The proposal projected an entered employment rate of seventy-seven percent for graduates, and was successful in reaching an entered employment rate of seventy-nine percent. The MSW SDA projected an employment retention rate of ninety percent. As of early March 1997, employment retention rates had not been calculated because follow-up was incomplete. Follow-up was being conducted through mail surveys, the MIS reports of the Division of Employment and Training, and electronic tracking through the Commonwealth's Unemployment Insurance Wage database..

By early March, almost eighty percent of the Metro South/West enrollees (94% of those who had completed training) had obtained employment as:

technical support specialist
computer programmer
carpenter, mold
printing stripper
hand painter
salesperson, general merchandise
admissions evaluator
electrical appliance servicer-apprentice
electronics technician
metal-fabricating-shop helper
line supervisor
policyholder information clerk
automotive maintenance equipment service
order filler
hand sewer
tire repairer
general repairer (automotive)
automobile mechanic
route clerk
component assembler
home attendant
electronics tester

As a comparison, only fifty-five percent of the non-NTO participants enrolled in JTPA Title II-A classroom training had entered employment.

Wages

The Metro South/West grant proposal anticipated starting wages between \$9.00 and \$21.00 per hour with benefits. The average hourly starting wage of the twenty-two participants who completed training was \$10.59, ranging from \$6.00 to \$20.91. Hourly placement wages by occupation were:

technical support specialist	\$20.91
computer programmer	\$20.00
carpenter, mold	\$14.04
printing stripper	\$13.50
hand painter	\$12.92
salesperson, general merchandise	\$12.00
admissions evaluator	\$12.00
electrical appliance	
servicer-apprentice	\$11.50
electronics tester	\$11.00
metal-fabricating-shop helper	\$10.94
route clerk	\$9.00
line supervisor	\$8.50
policyholder information clerk	\$8.17
automobile mechanic	\$8.00
automotive maintenance	
equipment servicer	\$8.00
order filler	\$7.80
hand sewer	\$7.50
tire repairer	\$7.50
component assembler	\$7.00
home attendant	\$6.50
general repairer (automotive)	\$6.00

The grant proposal anticipated wages of automotive graduates ranging from \$9 to \$12 per hour with benefits. The four automotive graduates earned from \$6.00 to \$8.00, wages somewhat lower than the Massachusetts median entry level hourly wage of \$8.50 for certified auto mechanics. Wages of \$10 to \$15 per hour with benefits were anticipated for electrical graduates. The four graduates of the electrical/electronic equipment program were paid between \$6.00 and \$11.50 per hour. The wages for construction workers were projected as \$10 to \$21 per hour with benefits. The graduate of the carpentry program earned \$14.04 per hour. The proposal predicted hourly earnings of \$10 to \$15 with benefits for labo-

ratory and electronics technicians. This was consistent with the \$12.00 earned by the biological technology program graduate and the \$10.94 per hour earned by the biomedical engineering graduate. Two women who completed the electrical/electronics/communications program generated hourly earnings of \$7.50 and \$11.00. The graduates of the electrical/equipment repair program earned \$7.50 and \$11.00 per hour, approximating the predicted \$9 to \$12 per hour range.

The MSW graduates who found employment by early March, 1997 received an average hourly wage of \$10.59, ranging from \$6.00 to \$20.91 per hour. Two individuals employed full-time upon program entry increased their average hourly wages by over twelve percent to \$8.07. The nine women with a recent work history earned an average of \$12.00 per hour, more than a one percent increase over their 1995 wages.

Of the previously employed participants whose wages increased greater than ten percent, two completed courses at Clark University, one in business systems networking and one in graphics and printing equipment operation. The two were high school graduates. They obtained positions as a computer programmer and printing stripper. Previously, they had worked as a data entry clerk and a pre-print stripper.

Nine former welfare recipients earned an average of \$10.39 per hour. Six recipients had wages above \$10 per hour as a pointer, a metal fabricating-shop helper, a mold carpenter, an electronics technician, an electronics tester and a general merchandise salesperson (of biomedical glassware). The nine recently unemployed individuals earned an hourly average wage of \$12.15, a two percent increase from their 1995 average hourly wage. The participant with no prior work history earned \$6.00 per hour. The ten women who found employment in nontraditional occupations earned an average hourly wage of \$10.80. These positions included technical support specialist (\$20.91), carpenter, mold (\$14.04), strip-

per (\$13.50), electrical appliance service-apprentice (\$11.50), metal-fabricating-shop helper (\$10.94), line supervisor (\$8.50), automotive maintenance equipment servicer (\$8.00), tire repairer (\$7.50), and general automotive repairer (\$6.00). Cross matching with the quarterly wage and employment status database revealed that three graduates had completed four quarters of employment. The quarterly wage and employment status database revealed that one participant who changed her post-training employer increased her average hourly wage to \$16.93. Another woman within two quarters earned \$13.24, an increase of \$1.74 above her post-training entry wage.

The average hourly wage (\$10.59) earned by program completers was almost thirteen percent greater than the \$9.40 average hourly wage anticipated by program participants mid-way through training in June 1996.

The increase in wages permitted changes in lifestyles. One hundred percent of the placed women (22) entered employment with benefits. The ten children of the eight single heads of household benefitted from the increased family income.

The non-NTO participants who had enrolled in JTPA Title II-A classroom training and had entered employment reported average hourly wages of \$9.78. The reported earnings (\$10.59) of the women in the NTO project who found employment were higher than those who had not participated (\$9.78). Eighty percent of the training completers found a training-related job compared to the ninety-five percent of the non-NTO participants in Title II-A training. Of the twelve non-NTO women enrolled in information sciences and systems, computer maintenance technology, heating, air conditioning, and refrigeration, engineering/related technology, biotechnology research, and computer installation and repair, nine entered employment at an average hourly wage of \$8.71. Eighty-nine percent (8) of these non-NTO completers found training related positions.

Women in Plastics in North Central Massachusetts

The North Central SDA grant proposal projected that twenty-three women, including women employed in plastics at the start, would be placed (a rate of seventy-six percent). The number recorded by MIS in unsubsidized employment by early January was twenty, a sixty-eight percent entered employment rate. Ten women completed the program with "employability enhancements", for a positive termination of thirty women. The MIS system showed that 97% had positive terminations. The MIS system confirmed nine graduates (38%) entered employments with benefits. Telephone follow-up in early December found twenty-eight participants working for an employment rate of ninety percent. Cross matching with the quarterly wage and employment status database revealed that seven participants completed four post-training quarters of employment. Six women who were employed upon enrollment in the plastics industry remained employed with their original employers. The employment retention rate has not been calculated as sufficient time has not elapsed and follow-up was not complete.

The grant proposal expected women to be eligible for employment in mold polishing, machine tools programming, machining, quality assurance, purchasing and sales. Initial MIS recorded placements were:

- applications engineer
- secretary
- customer service representative
- bookkeeper
- quality control inspector
- inspector
- legal secretary
- assembler
- nursery school assistant
- injection molding mechanic
- mirror pointer
- electronics tester
- photofinishing laboratory worker

file clerk
magnetic tape winder
tablet-making-machine operator
checker
stock control clerk
cashier
production supervisor

Forty-five percent of the entered employments were training-related. December telephone follow-up revealed one half (14) of the total worked as machine operatives and almost ten percent (5) worked in administrative support positions. Two each were employed as professionals, managers, and service workers. Service, precision production, crafts and assembly work each employed one woman.

Five women obtained employment in nontraditional occupations including: applications engineer, engineering project administrator, mold polishing mechanic, painter and photo reprinter. The thirteen women employed in the plastics industry worked in the following positions: accountant, assembler, customer service representative, first shift supervisor, group leader, machine operator, mold polishing mechanic, quality assurance engineer, quality assurance leadperson, quality control inspector, set-up person, and sorter. Eight women found employment in nontraditional industries: accounts payable clerk, applications engineer, building department clerk, senior electronics quality control inspector, electronics solderer, engineering project administrator, and photo reprinter.

Forty-seven percent of the non-NTO women enrolled in Title II-A classroom training entered employment. Ninety percent of the placements were in training related jobs. There were no nontraditional placements among the non-NTO registrants.

Wages

The proposal predicted that post-training hourly entry wages in North Central Massachusetts would range from \$7 to \$10. The preliminary January MIS report recorded average wages of \$9.50 per hour. MIS reported hourly entry wages ranging from \$5.50 to \$16.83:

applications engineer	\$16.83
secretary	\$15.00
customer service representative	\$12.00
quality control inspector	\$12.00
production supervisor	\$11.70
legal secretary	\$11.00
electronics tester	\$10.50
assembler	\$10.30
bookkeeper	\$9.62
cashier	\$9.50
inspector	\$9.06
checker	\$8.80
nursery school assistant	\$7.50
injection molding mechanic	\$7.21
mirror painter	\$7.00
photofinishing laboratory worker	\$7.00
file clerk I	\$7.00
magnetic tape winder	\$6.50
stock control clerk	\$6.00
tablet-making-machine-operator	\$5.50

Seven of the nine individuals not in the labor force at the beginning of the program found jobs paying hourly wages averaging \$7.86 and ranging from \$6.00 to \$10.50. Two women not in the labor force upon enrollment returned to college full-time. The average hourly wage of the seven former welfare recipients was \$7.64. Employed in machine operative and precision positions, they earned from \$7.00 to \$10.50 per hour.

After completing the training program, many of the participants experienced income gains. By December 1996, the incomes of fourteen of the twenty-eight employed women (50%) increased. The four women who were working part-time at the start of the program increased their average hourly wages by more than twelve percent to \$8.88. Three women obtained full-time jobs and the fourth worked almost the equivalent of full-time. Seven individuals who received public assistance, along with four unemployed individuals, joined payrolls. The four women unemployed upon enrollment earned an average hourly wage of \$9.02, a four percent increase over their

prior earnings. Eight women employed upon enrollment earned an average of \$10.54 per hour, an increase of thirty percent above prior hourly earnings. Two women, who left employment in the plastics industry for related employment in the electronics industry, received hourly raises of \$4.70 and \$3.35 respectively. Eight women, who found employment outside of the plastics industry, increased their average hourly wages by almost twenty-five percent to \$10.78 (with wages ranging from \$6.50 to \$16.83 per hour). Thirteen enrollees employed in the plastics industry earned an hourly average wage of \$11.74. The average hourly wage (\$9.50) earned by program completers was five percent less than the program participants anticipated average wage (\$10.00).

The increase in wages accelerated lifestyles changes. Nine women who entered employment reported receiving jobs with benefits. Four single heads of household with a total of ten children under the age of eighteen increased family incomes. One woman purchased a home in central Massachusetts.

The average hourly entered employment wage of non-NTO participants who completed JTPA Title II-A training was \$8.03, over 15% lower than the average hourly wage of \$9.50 recorded for the program participants.

Terminations and Completions

Each SDA expected thirty women to complete the training program. By the end of December 1996, twenty-five women in the Metro South/West program had completed their training (one woman moved). The positive termination rate was eighty-nine percent. One woman continued her education in an associate's degree program for electronics technology. Another woman who moved away subsequently found employment.

The North Central SDA anticipated thirty terminations. Thirty women completed successfully the group expo-

sure to plastics technology. By March, thirty women had terminated the program, one of whom moved out of state. The North Central positive termination rate was ninety-seven percent. Of the ten women who completed their program objectives, but did not enter employment, eight were still employed at their original company and had received neither upgrades nor salary increases. These women felt they were in a better position to be promoted when the opportunity arose. Two women returned to college degree programs full-time. All thirty women who completed the Plastics Technicians program believed that their employability had been enhanced.

40



Findings and Recommendations

Findings and Recommendations

1. Multiple outreach strategies, including public service announcements, were used extensively to ensure participation rates in effective programs

The Metro South/West and North Central SDAs used diverse and multiple methods of recruitment. All MSW participants were recruited from sources other than the training sponsor intake, including reverse referrals from training institutions to the training sponsor. Other fruitful sources were the welfare office and the employment service. Less than ten percent of the North Central Massachusetts participants enrolled in response to referrals from the local service delivery area. One-half of the enrollees learned of the program from classified ads and newspaper articles. Many women were not in regular contact with employment and training agencies. Utilizing the media (newspapers) was an effective method of reaching women not in the full-time labor force (displaced homemakers, welfare recipients, and part-time workers.) One-quarter of the participants were informed of the program by employers. Employers were used effectively in the recruitment process.

RECOMMENDATIONS

- 1.** Develop marketing tools explaining the benefits of the program for distribution to schools, employment and training agencies, and community based organizations.
- 2.** Well in advance of the start of the training program, target employment and training agencies and educational institutions with ample fliers on nontraditional occupations and announcements of planned training.
- 3.** Well in advance of the start of the training program, solicit locations where women congregate (supermarkets, laundromats, beauty salons, fitness centers, etc.) with fliers on nontraditional occupations and announcements of planned training.
- 4.** Well in advance of the start of the training program, conduct informational seminars on nontraditional occupations at secondary schools and employment and training agencies. Include discussions of

women's hesitance to participate in nontraditional training and the possible biases and attitudes of significant male influencers.

5. Before the training program starts, inform appropriate staff in local training agencies about the program and distribute adequate fliers.

6. Before the training program starts, distribute fliers on nontraditional occupations to admissions offices of proprietary schools, community colleges, and colleges.

7. Use employers as part of the recruitment process by soliciting referrals of women who need training for career advancement or whom the employer would hire if they had training. Contact existing employers in industries in which nontraditional occupations are prevalent.

8. Utilize intake staff as educators about nontraditional occupations and distributors of information on nontraditional occupations.

9. Utilize employment and training agencies such as state employment services to identify women interested in nontraditional occupations and to develop an awareness of nontraditional occupations and training resources in job seekers.

10. Utilize proprietary schools and community colleges to identify individuals who are interested in training for nontraditional occupations but are without adequate financial resources. Develop reverse referrals from the schools to the training sponsor.

11. Utilize public assistance agencies and community based organizations to identify women interested in nontraditional occupations and to develop an awareness of nontraditional occupations and training resources.

12. Use paid newspaper ads and newspaper articles in local daily and weekly newspapers to publicize training programs for nontraditional occupations.

13. Provide copy and video clips to local television stations (including cable) to broadcast the availability of training for nontraditional occupations as part of public service announcements.

14. Use public service announcements (copy and audio tape) and guest appearances on local radio stations to broadcast availability of training for nontraditional occupations.

15. Recruit outside the service delivery area or local office area. Provide outreach to potential commuters within the labor market area and surrounding service delivery areas.

2. Training programs were beneficial to workers employed part-time, employed at temporary help agencies or facing layoffs. Early interventions reduced the duration of joblessness.

In Massachusetts in 1994, forty-one percent of employed women worked part-time. Of the five hundred forty-nine thousand female part-time workers, almost one-quarter (127,000) usually worked full-time. Six thousand (2% of employed women) worked part-time because of slack work or unfavorable business conditions.

The two Metro South/West women employed part-time upon enrollment increased their average weekly wages over twenty percent to \$8.00 with work weeks of 30 and 40 hours respectively.

In the North Central program four participants were employed part-time upon enrollment. Three women found full-time employment upon training completion. They increased not only the number of hours they worked, but also their average hourly earnings to \$7.87, almost a ten percent increase. Two employed women who entered the program faced layoffs and subsequently lost their jobs. Continuing with the training, they regained employment as an electrical solderer of \$6.50 per hour and an applications engineer of \$35,000 per year. An unemployed woman who entered the program accepted employment shortly after the program began. Fortunately, she continued with the training because she subsequently lost the job. Sticking with the program, she regained employment.

RECOMMENDATION

1. Advertise the program's availability to women seeking full-time employment. Do not exclude women facing layoffs and reduced hours.

3. Vocational and career counseling were integrated into training programs because some job seekers were not sufficiently informed about wages and occupational outlook.

Analysis of the Massachusetts Reaction Form revealed that less than one-third of the participants expected to be using computers or office equipment in future employment. In the Metro South/West SDA, over one-third of the enrollees took training emphasizing the utilization of computers. One hundred percent of the North Central SDA participants were instructed in computer assisted design and computer processing.

The Metro South/West participants were required upon program acceptance to research the occupation they pursued. In mid-October, the North Central participants completed the Industry Trends and Occupations workshop offered by the Industrial Services Program. By early December, the MSW participants completed the workshop. The expected wages recorded on the Massachusetts Reaction Form by participants averaged higher than the training sponsor's projected placement wages and were substantially above the entry wages subsequently obtained. By June 1996, the participant's wages were modified as reported on the Massachusetts Response Form. The anticipated wages approximated the actual entry wages offered the graduates of the program. A woman who had originally expected to earn \$50 per hour changed her expectations to an average hourly wage ranging from \$7 to \$50. Another woman who anticipated a starting wage of \$20 modified her expectations to an average hourly wage ranging from \$8 to \$10. She accepted an on-the-job training position with a starting wage of \$7.21 per hour. She was satisfied that her wage would increase upon completion of her formal on-the-job training.

RECOMMENDATIONS

1. Gather and make local labor market information available for customer's use.

2. Before the start of the program, require labor market research so that participants have realistic expectations and a clear vision of career paths.

3. Provide a transition to job placement through labor market research and a job search session.

4. Provide current information on career pathways and the wages of experienced workers for the selected nontraditional occupation for which training is provided.

4. Self-awareness and self-esteem workshops were included in the nontraditional occupations training program and found to be beneficial for retention and confidence by the participants.

Training sponsor administrators believed that the self-awareness and self-esteem workshops improved program retention (89% in Metro South/West and 97% in North Central Massachusetts). Participants found these workshops beneficial. Participants completing the Massachusetts Reaction Form noted that they hoped the program would increase their self-confidence. On the Workshop Evaluation Form, participants rated the overall effectiveness of the Self-awareness Workshop as 5.0 on a five point scale. The Self-esteem Workshop received a rating of 4.8. Three respondents on the Massachusetts Response Form rated the self-esteem workshops as the most valuable portion of the training program. The women confided "the self-esteem workshops were most valuable to me", "general training, team building, self-esteem were most valuable to me", and "the portion of the training most valuable to me was self-esteem". Post-placement follow-up revealed that four women commented on increased self-confidence: "The support of the group increased my self-confidence", "I got a lot of self-confidence from the program", "self-confidence improved", "self-esteem workshop was great".

RECOMMENDATIONS

1. Provide group social and emotional support activities, particularly self-awareness and self-esteem building.

5. Mentoring programs required tremendous time commitment, coordination and planning.

In the Metro South/West SDA, twelve months (June to June) were required to recruit two mentors for four students at TAD Technical Institute. The training institutions and Women in the Building Trades augmented the mentor search. Recruitment for mentors for the North Central REB began earlier in May 1995. One hundred fifty women were contacted for leads. Potential mentor identification of thirty women yielded, by March, eight women able to provide mentoring. The Bay State Skills Corporation noted that the occupations and industries must be identified far in advance of the start of the program. The logistics of matching mentors and proteges from distant and diverse geographic areas was significant in the Metro South/West. The availability of the Leominster Center for Technical Education provided a designated meeting place in North Central Massachusetts.

RECOMMENDATIONS

1. In recruiting mentors, it is important to define their roles and responsibilities.

2. Well in advance of the start of the training program, identify women successfully employed in nontraditional occupations to recruit as potential mentors. Utilize the literature of professional and trade associations to identify potential mentor resources. Some associations have lists of members available for informational interviewing and community participation.

3. Well in advance of the start of the training program, create a directory of profiles of women working in nontraditional occupations. Include name, job title, employer, telephone, comments/advice and availability for career activities.

4. Do not exclude men or women pioneers employed in formerly nontraditional occupations from the mentor pool.

5. Provide training to potential mentors.
6. Create a social milieu (restaurant, reception at women's organization or club, coffee klatches) for mentor-protégé orientation.
7. Follow up to determine if the mentor/protégé is a good match for both participants.
8. Provide active mentoring with frequent communication (by phone, fax and in person) between mentor and protégé.

6. A modified voucher approach permitted individualized, customized training meeting the interests and aptitudes of the participants. It was empowering for the participants, but time-consuming for the training sponsors. The process was dependent on academic calendars and involved fiscal controls, contracting, scheduling, interagency coordination, and intensive follow-up.

The average time from the participant's first contact with the Metro South/West's intake to the start of the individualized training was ten weeks, with a mode of seven weeks. Metro South/West participants engaged in formal assessment, researched an occupation, and conducted their own training institution selection. Upon approval of the training selection, the participant started the admission process. Upon the participant's acceptance, the MSW case manager initiated the tuition payment. The participant flow from the initial contact with the North Central REB intake to enrollment in the group training averaged four weeks (with a mode of four weeks). Thus, the individualized referral to a training institution process consumed more than twice the preparation time as group enrollment.

The participants in the Metro South/West program selected training situations for the occupations for which they expressed a preference in the *Massachusetts Reaction Form*. The Metro South/West REB authorized tuition payment upon review and approval of the participant's choice. The Metro South/West process took up to one month from application to the participant's start of training. The enrollment schedule

of participants was impacted by academic schedules. During the first four months of the MSW program, women enrolled in training programs at proprietary and regional vocational technical schools which had monthly start dates. In the second half of the program, enrollments were in predominantly semester-based certificate programs at colleges, proprietary schools, and regional vocational technical schools.

In Phase Three of the North Central training program, participants selected courses fulfilling their individualized employability plans. Phase Three began in February 1996, a month past the prevalent spring semester start in colleges and regional vocational-technical schools. The initial enrollments were at an employer-sponsored technical institute. Approval standards and tuition ceilings were established by the REB Executive Director. A quasi-letter of credit was devised to permit students timely enrollment. Communications and coordination with training institutions (admissions, financial officers and training instructors) and participants were required to monitor student's progress.

RECOMMENDATIONS

1. Utilize as much as possible open-entry/open exit enrollment in programs instead of set entry and exit dates.
2. Utilize accredited training institutions offering portable credentials such as diplomas, certificates, academic credit or degree.
3. Utilize proprietary training schools (schools run for profit and linked to particular businesses and occupations) for short-term, open-enrollment training.
4. Use vocational technical schools and community colleges which offer quality training at reasonable costs.
5. Work with vocational-technical schools and community colleges offering fall, spring and summer semesters to maximize the use of available schedules.
6. Expect to adapt the training to the normal academic calendar offered by local training institutions. If the need for training is great and immediate, budget sufficient training funds for nontraditional schedules, evening hours, or weekend training.
7. Work with vocational technical schools and com-

munity colleges to create curricula with increased opportunities for hands-on instruction and on-the-job training.

8. Meet with admissions and fiscal officers of training institutions to create mutually acceptable referral and tuition payment processes.

9. Consider a "modified voucher" approach to finance individual referrals to proprietary schools, vocational-technical schools, community colleges and college courses.

7. Employer involvement in the design of curricula increased the relevancy of training, improved the delivery of training, and boosted participants' motivation.

The North Central REB staff partnered with the local technical school, a community college and the North Central Plastics Council in the design and implementation of the training program, Women in Plastics. The curriculum met the expressed needs of industry representatives. Mold making, computer processing, and CAD/CAM were included in the curriculum. Current topics such as ISO 9000, the European quality control standard, were covered in the curriculum. Many employers guest-lectured. The participants appreciated and expressed a desire for increased hands-on training on the *Massachusetts Training Evaluation Form*. Out of the ten responses, seven thought that hands-on training and vocational course work were most valuable. Participants commented favorably on the hands-on training, factory visits, and the input of various industry speakers. One participant expressed a desire for "more one on one with prospective employers about openings, wages, experience needed. How to get into the industries willing to train people." In the post-employment follow-up, two participants pointed out the relevancy of the training. One woman exclaimed "this course helped me understand the process and what my company does to make money". Another participant stated "In the next two months, my workplace will be installing computers at every work station. I need this course to get a jump-start". A third woman noted: "Loved trip to plastics museum".

Training program	Occupations	Employment Outlook 1994 - 2005	Median Entry Hourly Wage
Electrical/Electronics Equipment Repair	Commercial and Industrial Electronic Equipment Repairer	5%	\$13.80
Auto/Automotive Mechanic	Automobile Body Repairer	9%	\$9.00
	Auto Mechanic	14%	\$8.50
	Diesel Mechanic	15%	\$12.49
Electrical/Electronics/ Communication Technologies	Electrical and Electronics Technicians	8%	\$14.07
Business Systems Networking	Computer Programmer	21%	\$18.55
Graphics and Printing Equipment Operations	Designer	25%	\$14.95
	Electronic Pagination System Workers	70%	
	Printing Strippers	2%	
	Printing Press Operator	-3%	\$8.65
Computer Installer/Repairer	Computer Service Technicians	42%	\$15.00
Water Quality/Wastewater Treatment	Water & Liquid Waste Treatment Operators	11%	INA
Biomedical Engineering Related Biological Technology	Life Science Technician	12%	\$10.32
	Sales Representative, Scientific	5%	\$18.78
Carpentry	Carpenter	15%	\$9.58
Heating/Air Conditioning/Ventilating	Heating, Air Conditioning, and Refrigeration Mechanic	25%	\$12.71
Truck, Bus & Other Commercial Driving	Truck Driver, Heavy	7%	\$10.00

The Women in Plastics Program was designed with input from representatives of the plastics industry. A molds manufacturer stated " Skills are in high demand as well as well paid". The training included mold polishing, computer processing, and computer assisted design, skills identified as needed by the plastics industry.

Industry	Growth Occupations within Industries	Net Employment Change 1994-2005	Median Entry Hourly Wage
Rubber and Miscellaneous Plastics Industries	Numerical Control Machine Tool Operators	25%	\$9.91
	Industrial Machinery Mechanics	10%	\$10.54
	Machinery Maintenance Workers	6%	\$10.54
Chemicals and Allied Products	Chemical Technicians	15%	\$10.58

RECOMMENDATIONS

1. Include local employers in the design of curricula for training programs.
2. Consider proprietary schools, vocational-technical schools and community colleges with employer advisory boards or employer involvement because their training is more likely to be current with industry standards.
3. Provide orientation, technical assistance, and lesson plans to industry representatives who are inexperienced in classroom teaching or guest lecturing.

8. Training was focused on occupations and industries which had favorable employment outlooks and paid living wages which contributed to the high entered employment rates of program participants.

One of the major criteria that the consortium which prepared the grant proposal used in selecting training sponsors was the identification of nontraditional occupations and industries with positive employment

growth and average entry hourly wages of \$7.00 or greater within their service delivery area. Both the Metro South/West and Metro North Central REBs met the criteria.

The MSW participants on completion of their occupational research selected training for occupations with favorable outlooks and adequate wages.

RECOMMENDATIONS

1. Use local labor market information for program planning.
2. Analyze current information on career pathways and the wages of experienced workers for the selected nontraditional occupation for which training is provided.

9. Multiple job search methods and intermediaries were used to secure employment

The grant proposal was vague about job search methods and placement intermediaries. Placement intermediaries cited in the proposal included contracted training institutions, the job listings of the employment service, and employers belonging to the Plastics Advisory Council. Coordination and collaboration of job placement efforts were not considered in the proposal. A self-directed job search was assumed. As the participants completed their training, program administrators found that they needed to focus on job search efforts.

Multiple job search methods were used by North Central participants. One participant secured her job by applying directly to a plastics employer. Another participant found employment at a plastics company at which a guest speaker was employed. Two women gained employment at a plastics company at which a mentor worked. In response to the Massachusetts Placement Evaluation Form, three participants reported finding jobs through newspaper advertisements and one through the referral of a friend. Two of the three recipients who obtained employment after the program started subsequently were laid off because of slack work. These unsuccessful placements and a lack of job seeking skills on the part of the woman with no work history and the five welfare recipients with limited work histories suggested a need for a more aggressive job search component. Displaced homemakers, welfare recipients and women with no work history generally had little familiarity with resume writing and career networking. The North Central REB director encouraged the participants to attend job search workshops at the Career Center of North Central Massachusetts. Incorporating

rating the resume development, networking, and interviewing workshops offered by the career center increased the job seeking success of those who participated.

RECOMMENDATIONS:

1. Hold intensive job search workshops.
2. Hold workshops on career networking.
3. Use multiple job search intermediaries including training instructors, placement services of training institutions, and the employment service.
4. Send brief profiles of graduates to employers in appropriate industries.
5. Develop placement marketing tools for employers explaining the benefits of the trained workers, i.e. increased productivity, improved retention, reduced training costs.
6. Organize support groups for job seekers.

10. Intensive follow-up increased training retention and increased "entered employments" and "employability enhancements", reportable on the Job Training Partnership Act reporting system.

A case manager was assigned to monitor and follow-up on participants in the Metro South/West service delivery area. Training retention was vigorously pursued by the case manager. Job retention follow-up was delegated to the training institutions. Cross-matching revealed that one participant who moved had entered employment, and that two women had increased post-placement earnings.

The Women in Plastics Program provided intensive follow-up and tracking. However, in August 1996, the REB Executive Director left and a lag in the appointment of a REB staff member as liaison to the Women in Plastics program adversely affected follow-up. Earlier intervention may have salvaged two participants who dropped out of Phase Three training in the early autumn of 1996. One participant left a community college course after two classes and the other

dropped out of a course because of a lack of a computer to use to complete her homework assignments. The newly appointed REB staff member felt if it were known the REB might have intervened with the training institution on the women's behalf to arrange a course transfer, thus avoiding a loss of tuition. The newly appointed REB staff member initiated intensive follow-up, mailing the Course and Placement Follow-up Letter. She telephoned participants regularly. This aggressive follow-up captured wage increases received by ten women. The participants were repeatedly reminded of the availability of the job assistance services of the Career Center of North Central Massachusetts. As of early January 1997, twenty-eight of the thirty program completers were working and two women were enrolled full-time in community colleges.

RECOMMENDATIONS

1. Provide a case manager/counselor/liaison.
2. Communicate frequently with training institution instructors on participant's progress.
3. Conduct face-to-face follow-up visits at training and employment sites
4. Provide intensive follow-up upon training completion to foster job placement and retention.
5. Continue follow-up beyond the thirteen weeks required by JTPA to capture information on entered employment and wage gains.

Commonwealth of Massachusetts – Department of Employment and Training

Massachusetts Women in Non–Traditional Occupations

North Central Regional Employment Board

Period Ending March 31, 1997

<u>Participant and Termination Summary</u>	<u>Annual Plan</u>	<u>Actual YTD</u>	<u>Percent of Annual Plan</u>
Total Participants	30	31	103%
Entered Employment	23	20	87%
Entered Employment Rate	77%	67%	87%

<u>Training Vendor</u>	<u>Type of Training</u>	<u>Participants</u>
Leominster Center for Technical Educ.	Plastics Technician	31

<u>Participant Characteristics</u>	<u>Participants</u>	<u>Percent of Total</u>
Age 22 – 29	7	23%
Age 30 – 39	13	42%
Age 40 – 54	11	35%
White	23	74%
Minority	8	26%
School Drop-out	3	10%
Welfare Recipient	7	23%
Single Head of Household	10	32%

Metro South/West Employment and Training

Period Ending March 31, 1997

<u>Participant and Termination Summary</u>	<u>Annual Plan</u>	<u>Actual YTD</u>	<u>Percent of Annual Plan</u>
Total Participants	30	28	93%
Entered Employment	23	22	96%
Entered Employment Rate	77%	79%	102%

<u>Training Vendor</u>	<u>Type of Training</u>	<u>Participants</u>
Assabet Valley Vocational Tech.	Refrigerator Repair	1
Assabet Valley Vocational Tech.	Electronics	2
Assabet Valley Vocational Tech.	Carpentry	1
Bay State School of Appliances	Computer Electronics	1
Bay State School of Appliances	Major Appliance Repair	4
ITT Technical Institute	Electronics	1
TAD Technical Institute	Auto Technician	4
TAD Technical Institute	Diesel Technician	2
Quincy College	Environmental Sciences	1
Minuteman Tech	Biological Technology	1
Minuteman Tech	Biomedical Engin./Technology	1
New England Tractor Trailer	Truck Driver	1
Clark University	Business Systems Networking	3
Clark University	Graphic/Printing Equip. Oper.	1
Clark University	Computer graphics	1
Clark University	CNE/Computer Facilities Oper.	1
RETS	Electronic Technician	1
Keefe Tech	Graphic/Printing Equip. Oper.	1

<u>Participant Characteristics</u>	<u>Participants</u>	<u>Percent of Total</u>
Age 22 – 29	9	32%
Age 30 – 39	12	43%
Age 40 – 54	6	21%
Age 55 and over	1	4%
White	23	82%
Minority	5	18%
School Drop-out	6	21%
Welfare Recipient	11	39%
Single Head of Household	17	61%

NTOMar97
FINAL
3/18/97

CONSTRUCTION & MAINTENANCE PAINTING & PAINT SPRAYING MACHINE OPERATORS PAPERHANGERS PARKING LOT ATTENDANTS PEST CONTROL OCCU-

PAT & LITHOGRAPHERS PHYSICISTS & ASTRONOMERS PLASTERERS PLUMBERS PIPEFITTERS & AMFITTERS POLICE DETECTIVES POWER

PLANT OPERATORS PRECISION ASSEMBLERS METAL PRECISION GRINDERS FILERS & TOOL SHARPENERS PRINTING PRESS OPERATORS PRODUCTION

HELPERS RAILROAD CONDUCTORS & YARDMASTERS ROPE ENGINEERS SALES WORKERS HARDWARE & BUILDING SUPPLIES SALES WORKERS

MOTOR VEHICLES & BOATS SALES WORKERS AUTOMOTIVE PARTS SEPARATING FILTERING & CLARIFYING MACHINE OPERATORS SHEET METAL WORKERS

SHEETMETAL & DUCT INSTALLERS SHERIFFS BAILIFFS & OTHER LAW ENFORCEMENT OFFICERS SHIP CAPTAINS SHOE REPAIRERS ENGINE REPAIR-

ERS SPECIFIED MECHANICS & REPAIRERS STRUCTURAL METAL WORKERS SUPERVISORS PLUMBERS PIPEFITTERS & STEAMFITTERS SUPERVISORS

BRICKMASONS STONEMASO TTTERS SUPERVISORS CARPENTERS & RELATED WORKERS SUPERVISORS CLEANING & BUILDING SERVICE WORKERS

SUPERVISORS CONSTRUCTION SUPERVISORS ELECTRICIANS & POWER TRANSMISSION INSTALLERS SUPERVISORS FIREFIGHTING & FIRE PREVENTION

OCCUPATIONS SUPERVISORS GUARDS SUPERVISORS MECHANICS & REPAIRERS SUPERVISORS MOTOR VEHICLE OPERATORS SUPERVISORS PAINTERS

PAPERHANGERS & PLASTERERS SUPERVISORS POLICE & DETECTIVES SUPERVISORS PRODUCTION OCCUPATION SUPERVISORS RELATED AGRICULTURAL

OCCUPATION SURVEYING & MAPPING TECHNICIANS TAXICAB CHAUFFEURS TELEPHONE INSTALLERS REPAIRERS TELEPHONE LINE INSTALLERS

& REPAIRERS TILE SETTERS HARD & SOFT TIMBER CUTTING & LOGGING OCCUPATIONS TOOL & DIE MAKERS TRAFFIC SHIPPING & RECEIVING CLERKS

TRANSPORTATION COMMUNICATIONS & OTHER PUBLIC UTILITIES TRUCK DRIVERS UPHOLSTERERS USHERS VEHICLE WASHES & EQUIPMENT CLEANERS

WATER & SEWAGE TREATMENT PLANT OPERATORS WELDERS CUTTERS WHOLESALE & RETAIL TRADE BUYERS AEROSPACE ENGINEERS AIRPLANE PILOTS